



ETHYLENE OXIDE EMISSION COMPLIANCE STUDY

Performed At The
Sterigenics U.S., LLC
Grand Prairie Facility
Catalytic Oxidizer System
Grand Prairie, Texas

Test Date
May 30, 2019

Report No.
TRC Environmental Corporation Report 329025

Report Submittal Date
July 26, 2019

TRC Environmental Corporation
9225 US Hwy South
Austin, Texas 78747
USA

T (512) 201-1204
F (512) 201-0222



Report Certification

I certify that to the best of my knowledge:

- Testing data and all corresponding information have been checked for accuracy and completeness.
- Sampling and analysis have been conducted in accordance with the approved protocol and applicable reference methods (as applicable).
- All deviations, method modifications, or sampling and analytical anomalies are summarized in the appropriate report narrative(s).

A handwritten signature of "Richard Stallings" in black ink.

Richard Stallings
Project Manager

7/26/19

Date

TRC was operating in conformance with the requirements of ASTM D7036-04 during this test program.

A handwritten signature of "Bruce Randall" in black ink.

Bruce Randall
TRC Emission Testing Technical Director



TABLE OF CONTENTS

1.0 INTRODUCTION	4
1.1 Project Contact Information.....	4
1.2 Facility and Process Description	5
2.0 SPECIFIC TEST PROCEDURES	6
3.0 SUMMARY OF RESULTS.....	7
4.0 DISCUSSION OF RESULTS	7
5.0 SAMPLING AND ANALYSIS PROCEDURES	8
5.1 Determination of Sample Point Locations by USEPA Method 1	8
5.2 Ethylene Oxide Determination by Method CARB 431.....	8
6.0 QUALITY ASSURANCE PROCEDURES.....	9
7.0 TEST RESULTS SUMMARY	10

APPENDIX

USEPA Approval Letter.....	12
Qualified Individual Certificate(s).....	14
Test Train Diagram	16
Processed Field Data and Results	17
Calibration Gas Certificates	138



EMISSIONS COMPLIANCE STUDY

1.0 INTRODUCTION

TRC Environmental Corporation (TRC) performed an emissions compliance test program on the Catalytic Oxidizer System at the Grand Prairie Facility of Sterigenics U.S., LLC in Grand Prairie, Texas on May 30, 2019. The tests were authorized by and performed for Sterigenics U.S., LLC.

The purpose of this test program was to evaluate the destruction efficiency of ethylene oxide (ETO) on the catalytic oxidizer with normal operating conditions. The results of the test program will be used to demonstrate compliance with the conditions established in the facility's air quality permit issued by the Texas Commission on Environmental Quality (TCEQ), and the NESHAP for Ethylene Oxide Emission Standards for Sterilization Facilities found at 40 C.F.R. Part 63, Subpart O. The test program was conducted according to the TRC Test Protocol dated April 1, 2019.

1.1 Project Contact Information

Participants		
Test Facility	Sterigenics U.S., LLC Grand Prairie Facility 1302 Avenue T Grand Prairie, Texas 75050	Joseph Ulfig 630-928-1710 julfig@sterigenics.com Chris Bonilla General Manager 972-602-9430 cbonilla@sterigenics.com Kevin Pruitt Maintenance Supervisor 972-602-9430 kpruitt@sterigenics.com
Air Emissions Testing Body (AETB)	TRC Environmental Corporation 9225 US Hwy South Austin, Texas 78747	Richard Stallings Project manager 512-201-1203 rstallings@trccompanies.com

The tests were conducted by Richard Stallings of TRC. Documentation of the on-site ASTM D7036-04 Qualified Individual (QI) can be located in the appendix to this report.



1.2 Facility and Process Description

The Grand Prairie facility's sterilization and emission-control equipment currently consists of the following:

- Three Vacudyne and two Trumbo commercial ethylene oxide gas sterilizers:
 - 30 pallet capacity,
 - Steam heated,
 - Equipped with a Dekker 3-pump oil-sealed liquid ring recirculating vacuum pump skid, consisting of two 50 HP liquid ring pumps, plus one 25 HP booster pump;
- One 12,200 square foot aeration room, comprised of a heated aeration chamber and exhaust system.

Sterilizer vacuum pump emissions are controlled by:

- One Advanced Air Technologies Safe Cell I system:
 - Packed-tower chemical scrubber, equipped with a packed reaction/interface column,
 - Fluid recirculation system, consisting of 2 recirculation pumps, one operating as a primary pump and the other as backup, each operating at 350 gpm and 15 HP
 - Two scrubber fluid reaction tanks.

Aeration and sterilizer backvent emissions are controlled by:

- One Maxon catalytic oxidizer:
 - Operating at 15,000 SCFM
 - Equipped with a prefilter gas-fired heater, reactive catalyst bed, and an exhaust blower.

The following process operation data was collected:

- Oxidizer temperature at probe located nearest catalyst bed outlet
- ETO concentration at the inlet and outlet of catalytic oxidizer



2.0 SPECIFIC TEST PROCEDURES

Detailed test procedures are described in Section 5 of this test report. Test runs were performed in accordance with the following USEPA approved methods:

1. ETO emissions were determined in accordance with California Air Resources Board (CARB) Method 431, *The Determination of Ethylene Oxide in Stationary Sources*, direct interface procedure. Two gas chromatographs, with a flame ionization detector (GC/FID) interfaced directly to the emission source were used to continuously monitor ethylene oxide concentration simultaneously at the inlet and outlet of the control device. Each test run consisted of one aeration cycle run and one backvent test run. Sampling was initiated for the first evacuation when the pressure in the sterilizer was released. Sterilant gas usage was 100 percent ETO.

The use of CARB Method 431 as an alternative to the testing requirements in Section 63.365(b) of 40 CFR Part 63, Subpart O has been recognized and approved by the USEPA. The approval letter is appended to this test report for review.

2. Aeration testing was conducted with freshly sterilized product. The backvent cycle assessment was conducted with a freshly sterilized load of product.
3. Volumetric airflow measurements are not required during this test program for these reasons as stated in CARB Method 431:
 - a) No dilution between inlet and outlet sampling locations
 - b) Identical flow at inlet and outlet sampling locations
 - c) Constant flow throughout the duration of the compliance test
4. Compliance was determined using the concentration of ETO at the inlet and the concentration of ETO at the outlet of the control unit. Compliance determination was performed in accordance with CARB Method 431 using this calculation:

$$\%Eff = (C_i - C_o) / C_i \times 100$$

C_i = Total concentration of ETO delivered to the control unit inlet

C_o = Total concentration of ETO as measured at the control unit outlet



3.0 SUMMARY OF RESULTS

The results of this test program are summarized in the table below. Detailed individual run results are presented in Section 6.0.

Unit ID	Pollutant Tested	Measured Emissions	Permitted Emission Limit
Oxidizer	ETO-Backvent	0.026 ppmv	1 ppmv
Oxidizer	ETO-Backvent	99.9435% DE	99.0% DE
Oxidizer	ETO-Aeration	0.046 ppmv	1 ppmv
Oxidizer	ETO-Aeration	99.8407% DE	99.0% DE

The Limit of Detection (LOD) was calculated for each test location. The calculated LOD for the inlet and outlet test locations was 0.02 ppm.

The table below summarizes the test methods used, as well as the number and duration of test runs at each test location:

Unit ID/ Sample Location	Parameter Measured	Test Method	No. of Runs	Run Duration
Oxidizer Inlet & Outlet	Ethylene Oxide (ETO)	CARB Method 431	3	15 min (Backvent)
			3	60 min (Aeration)

4.0 DISCUSSION OF RESULTS

Following procedures for the maximum combustion efficiency for ETO, the catalytic oxidizer met the following specifications:

- A. The oxidizer operating temperature was maintained above 300° Fahrenheit.
- B. The maximum firing rate for the catalytic oxidizer did not exceed 1.5 MMBtu/hr

Three (3), fifteen (15) minute test runs were conducted with the system operating in Backvent mode and three sixty (60) minute test runs were conducted with the system operating in Aeration mode.



No problems were encountered with the testing equipment during the test program. Source operation appeared normal during the entire test program. No changes or problems were encountered that required modification of any procedures presented in the test plan. No adverse test or environmental conditions were encountered during the conduct of this test program.

5.0 SAMPLING AND ANALYSIS PROCEDURES

All testing, sampling, analytical, and calibration procedures used for this test program were performed in accordance with the methods presented in the following sections. Where applicable, the Quality Assurance Handbook for Air Pollution Measurement Systems, Volume III, Stationary Source Specific Methods, USEPA 600/R-94/038c, September 1994 was used to supplement procedures.

5.1 Determination of Sample Point Locations by USEPA Method 1

This method is applicable to gas streams flowing in ducts, stacks, and flues and is designed to provide guidance for the selection of sampling ports and traverse points at which sampling for air pollutants will be performed. Sample ports must be located at least two duct diameters downstream and a half a duct diameter upstream from any flow disturbance.

The cross-section of the measurement site was divided into a number of equal areas, and the traverse points were located in the center of each area. The minimum number of points were determined from Figure 1-2 (non-particulate) of the Method.

5.2 Ethylene Oxide Determination by Method CARB 431

This method applies to the measurement of ethylene oxide emissions from specified stationary sources utilizing a gas chromatograph (GC).

The GC was calibrated directly with compressed gas standards of ethylene oxide (ETO) to establish linearity across the ranges of concentrations found in the stack gas. Linearity of the FID response was determined using five different levels of calibration gas concentrations (approximately 1, 10, 50, 100 and 500 ppm) certified with a $\pm 2\%$ accuracy limit. A least-squares regression equation was calculated from this calibration.

A mid-level gas was analyzed as the post-test check. The post-test check must be within 5% of the initial calibration curve for the initial calibration curve to be used to calculate concentrations. The site-specific ETO detection limit was determined. This detection limit was calculated as three times the standard deviation of seven replicate injections.



6.0 QUALITY ASSURANCE PROCEDURES

TRC integrates our Quality Management System (QMS) into every aspect of our testing service. We follow the procedures specified in current published versions of the test Method(s) referenced in this report. Any modifications or deviations are specifically identified in the body of the report. We routinely participate in independent, third party audits of our activities, and maintain:

- Accreditation from the Stack Testing Accreditation Council (STAC) and the American Association for Laboratory Accreditation (A2LA) that our operations conform with the requirements of ASTM D 7036 as an Air Emission Testing Body (AETB).

These accreditations demonstrate that our systems for training, equipment maintenance and calibration, document control and project management will fully ensure that project objectives are achieved in a timely and efficient manner with a strict commitment to quality.

All calibrations are performed in accordance with the test Method(s) identified in this report. If a Method allows for more than one calibration approach, or if approved alternatives are available, the calibration documentation in the appendices specifies which approach was used. All measurement devices are calibrated or verified at set intervals against standards traceable to the National Institute of Standards and Technology (NIST). NIST traceability information is available upon request.

ASTM D7036-04 specifies that: "*AETBs shall have and shall apply procedures for estimating the uncertainty of measurement. Conformance with this section may be demonstrated by the use of approved test protocols for all tests. When such protocols are used, reference shall be made to published literature, when available, where estimates of uncertainty for test methods may be found.*" TRC conforms with this section by using approved test protocols for all tests.



7.0 TEST RESULTS SUMMARY

Test Run Number	1-BV	2-BV	3-BV	
Run Start Time	9:15	9:52	11:09	
Run End Time	9:30	10:07	11:24	
Operation Mode	Backvent	Backvent	Backvent	
Barometric Pressure	29.4	29.4	29.4	
Ambient Temperature	72	72	75	
Ambient Humidity	72	73	64	
Test Results				Average
Inlet Concentration (ppmv)	28.258	43.739	36.359	36.119
Outlet Concentration (ppmv)	0.00	0.047	0.031	0.026
Destruction Efficiency (%)	100.0	99.89	99.91	99.9435

Test Run Number	1-Aeration	2-Aeration	3-Aeration	
Run Start Time	12:00	13:09	14:57	
Run End Time	13:00	14:09	15:57	
Operation Mode	Aeration	Aeration	Aeration	
Barometric Pressure	29.4	29.4	29.4	
Ambient Temperature	75	82	82	
Ambient Humidity	64	41	41	
Test Results				Average
Inlet Concentration (ppmv)	31.863	27.280	27.642	28.928
Outlet Concentration (ppmv)	0.0503	0.018	0.070	0.046
Destruction Efficiency (%)	99.84	99.93	99.75	99.8407

APPENDIX



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

RECEIVED

APR 25 1999

APR 19 1999

Air Division
U.S. EPA, Region 9

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

MEMORANDUM

SUBJECT: Alternative to Test Method Requirements Under 40 CFR Part 63, Subpart O

FROM: *J. David Mobley, Acting Director*
Emissions, Monitoring and Analysis Division, OAQPS (MD-14)

TO: David P. Howekamp, Director
Air Division, Region 9

I am writing in response to a request from Region 9 dated March 22, 1999, in which the Region requested the review and approval of an alternative method. The alternative method request involves the use of California Air Resources Board (CARB) Method 431, "Determination of Ethylene Oxide Emissions from Stationary Sources," dated November 13, 1998. The submittal from CARB to Region 9 is in response to an earlier review and comments provided by Rima Dishakjian of my staff.

Based on a review of this submittal, we are approving the use of CARB Method 431, dated November 13, 1998, as an alternative to the testing requirements in Section 63.365(b) of 40 CFR Part 63, Subpart O, "Ethylene Oxide Emissions Standards for Sterilization Facilities." Please contact Rima Dishakjian at (919) 541-0443 if we can provide further information regarding this alternative.

FAX TRANSMISSION

U.S. EPA REGION IX
75 HAWTHORNE ST.
SAN FRANCISCO, CA 94105
415-744-1191
FAX: 415-744-1076

To: Cindy Castronovo - CARB **Date:** May 27, 1999
cc: Ron Walter

Fax #: 916-263-2067 **Pages:** 1, including this cover sheet.
916-327-5621

From: Stanley Tong *S.Tong*

Subject: CARB 431 - Ethylene Oxide Test Method

Cindy,

Earlier this month I faxed you a copy of a letter dated April 19, 1999 from EPA's Emissions Monitoring and Analysis Division. The letter approved CARB's Method 431 - "Determination of Ethylene Oxide Emissions from Stationary Sources".

The letter stated that CARB Method 431, dated November 13, 1998 was approved as an alternative to the testing requirements in Section 63.365(b) of 40 CFR 63, Subpart O, "Ethylene Oxide Emissions Standards for Sterilization Facilities".

In a fax dated May 13, 1999, Ron Walter requested clarification on: "Is the procedure outlined in method 431 approved for aeration vents". The Emission Measurement Center (Rima Dishakjian) informed me that CARB Method 431 is approved for aeration room vents. Please do not hesitate to contact me if you have additional questions.

Stan

This is to Certify that:

Richard Stallings

Is a Qualified Individual as defined in Section 8.3 of ASTM D7036-04 for the following test methods:

EPA Methods 1, 1A, 2, 2A, 2C, 2D, 2F, 2G, 2H, 3, 3B, 4, 5, 5A, 5B, 5D, 5E, 5F, 5i, 17, 19, 201A, and 202.

The individual has met the minimum experience requirements defined in Section 8.3.4.2 of ASTM D7036-04 and has successfully passed a comprehensive examination for the test methods designated above.

This certification is effective until:

10-13-2020



Date of Issue: 10-27-2015

Certificate Number: 00849

Edward J MacKinnon

Air Measurements Practice Quality Manager

This certificate is the exclusive property of TRC and is non-transferable.



This is to Certify that:

Richard Stallings

Is a Qualified Individual as defined in Section 8.3 of ASTM D7036-04 for the following test methods:

EPA Method 18

The individual has met the minimum experience requirements defined in Section 8.3.4.2 of ASTM D7036-04 and has successfully passed an internal comprehensive examination for the test methods designated above.

This certification is effective until:

08-14-2020



Date of Issue: 08-17-2015

Certificate Number: 00801

Edward J MacKinnon

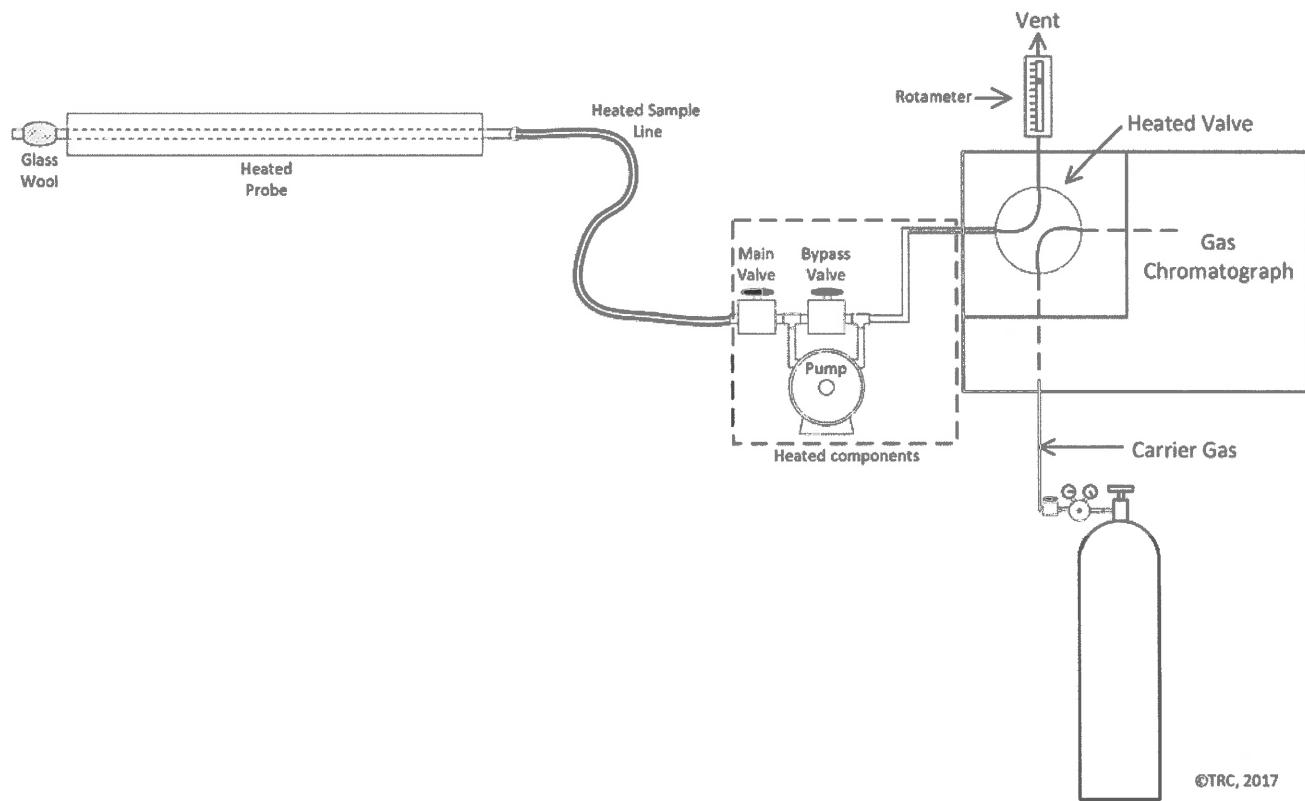
Air Measurements Practice Quality Manager



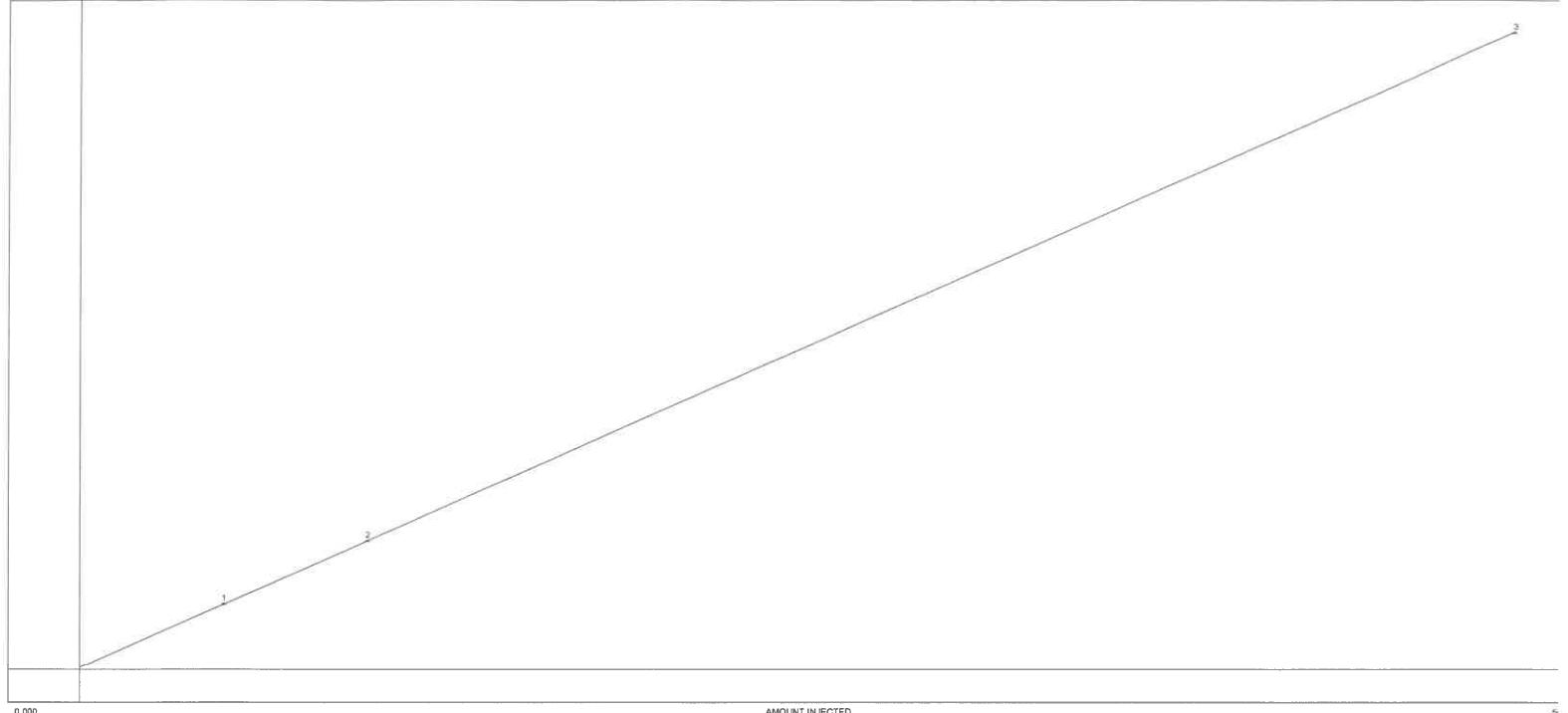
This certificate is the exclusive property of TRC and is non-transferable.

Determination of Gaseous Organic Compounds by Gas Chromatography (Direct Interface Procedure)

USEPA Promulgated CARB Method 431



©TRC, 2017



xe of curve: 3.26

steeppt: 4.31

:1.00

of levels: 3

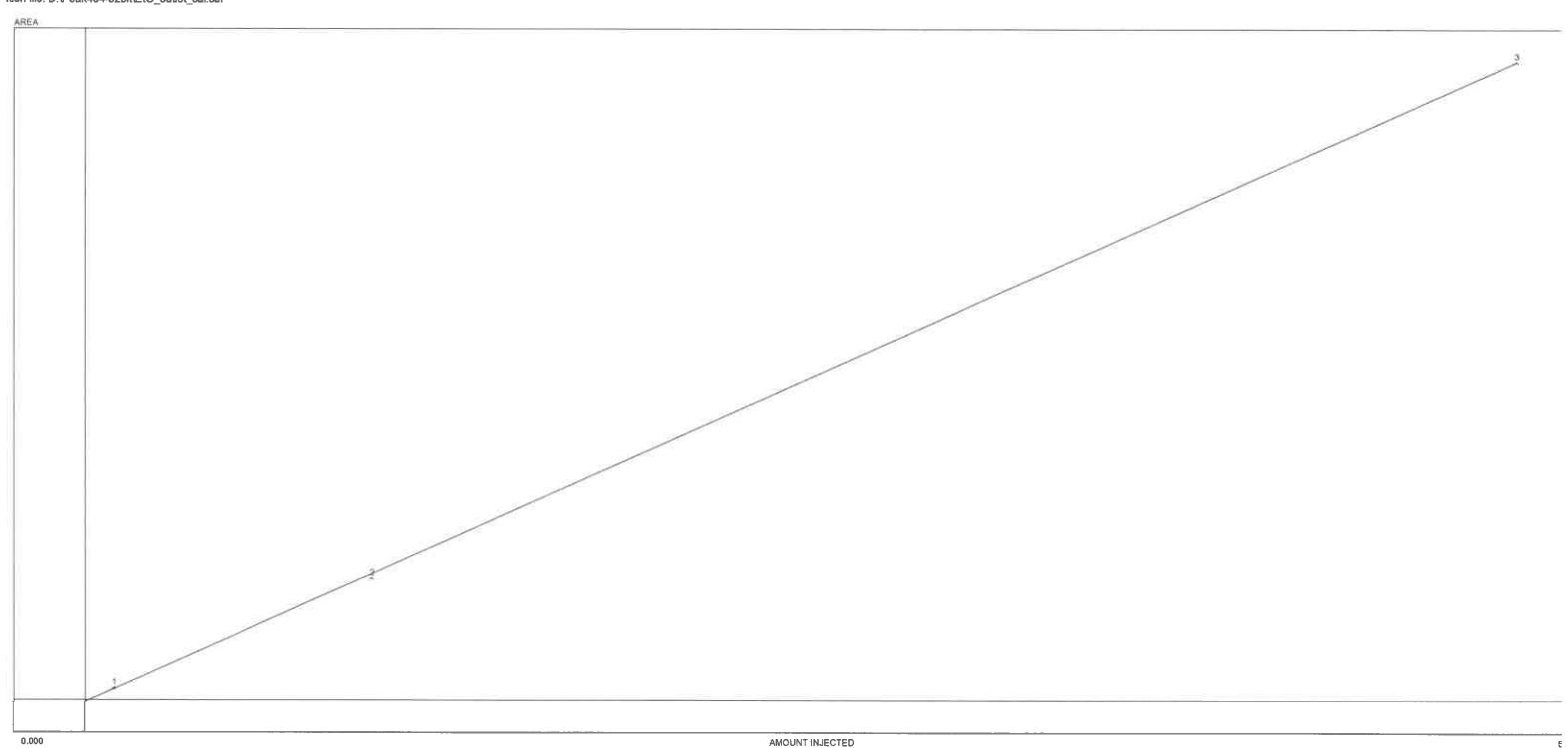
ID of CF: 0.1/2.1

14X4.3058

30

created: Wed Jul 10 16:10:51 2019

if#	Amount	CF	Current	Previous #1	Previous #2
.324	50.000	3.200	1633.268	1631.757	1633.450
.044	500.000	3.220	331.560	331.867	332.717
2.817	500.000	3.268	1633.268	1631.757	1633.450



σ of curve: 15.27
intercept: -2.26
 r : 1.00
of levels: 3
ID of CFs: 0,4/2.4
'49X+-2.2602
39
brated: Thu Jul 11 14:48:4

#/HL	Amount	CF	Current	Previous #1	Previous #2
*15	1.000	14.715	14.971	14.914	14.259
.581	10.000	14.558	145.080	145.958	145.705
.434	50.000	15.249	762.627	760.243	784.432

Inlet LOQ

Calculation of Method Detection Limit using CARB 431 Criteria

	Sample ID	Data	Units
1	594	170.8592	Area
2	595	169.6242	Area
3	596	170.4842	Area
4	597	169.7866	Area
5	598	169.2921	Area
6	599	171.5234	Area
7	600	169.2164	Area
# of data Points		7	

Standard Deviation	0.866704
Least-squares X-Intercept	-1.32145
Least-squares Y-Intercept	4.31
Least squares Slope	3.26
Limit of Detection (LOD)	-1.84723

	RT	AC	Calc	Cert	RF
			Conc	Conc	
GP_in_579.	5/30/19	6:54:18 ETO_IN	2.05 331.5597	101.4223	100 3.316
GP_in_580.	5/30/19	6:57:18 ETO_IN	2.046 331.8566	101.5131	100 3.319
GP_in_581.	5/30/19	7:00:18 ETO_IN	2.046 332.7167	101.7762	100 3.327
GP_in_585.	5/30/19	7:12:18 ETO_IN	2.043 1633.263	499.6064	500 3.267
GP_in_586.	5/30/19	7:15:18 ETO_IN	2.043 1631.757	499.1456	500 3.264
GP_in_587.	5/30/19	7:18:18 ETO_IN	2.053 1633.43	499.6573	500 3.267
GP_in_594.	5/30/19	7:39:18 ETO_IN	2.046 170.8592	52.2649	50 3.417
GP_in_595.	5/30/19	7:42:18 ETO_IN	2.05 169.6242	51.88712	50 3.392
GP_in_596.	5/30/19	7:45:18 ETO_IN	2.053 170.4842	52.15019	50 3.410
GP_in_597.	5/30/19	7:48:18 ETO_IN	2.05 169.7866	51.9368	50 3.396
GP_in_598.	5/30/19	7:51:19 ETO_IN	2.046 169.2921	51.78554	50 3.386
GP_in_599.	5/30/19	7:54:19 ETO_IN	2.046 171.5234	52.46808	50 3.430
GP_in_600.	5/30/19	7:57:19 ETO_IN	2.05 169.2164	51.76238	50 3.384
GP_in_601.	5/30/19	8:00:19 ETO_IN	2.043 169.4066	51.82056	50 3.388
GP_in_602.	5/30/19	8:03:19 ETO_IN	2.043 169.4987	51.84874	50 3.390
GP_in_603.	5/30/19	8:06:19 ETO_IN	2.05 169.2838	51.783	50 3.386 Spike

Spike Recovery (%) 0.9992751

Outlet LOQ

Calculation of Method Detection Limit using CARB 431 Criteria

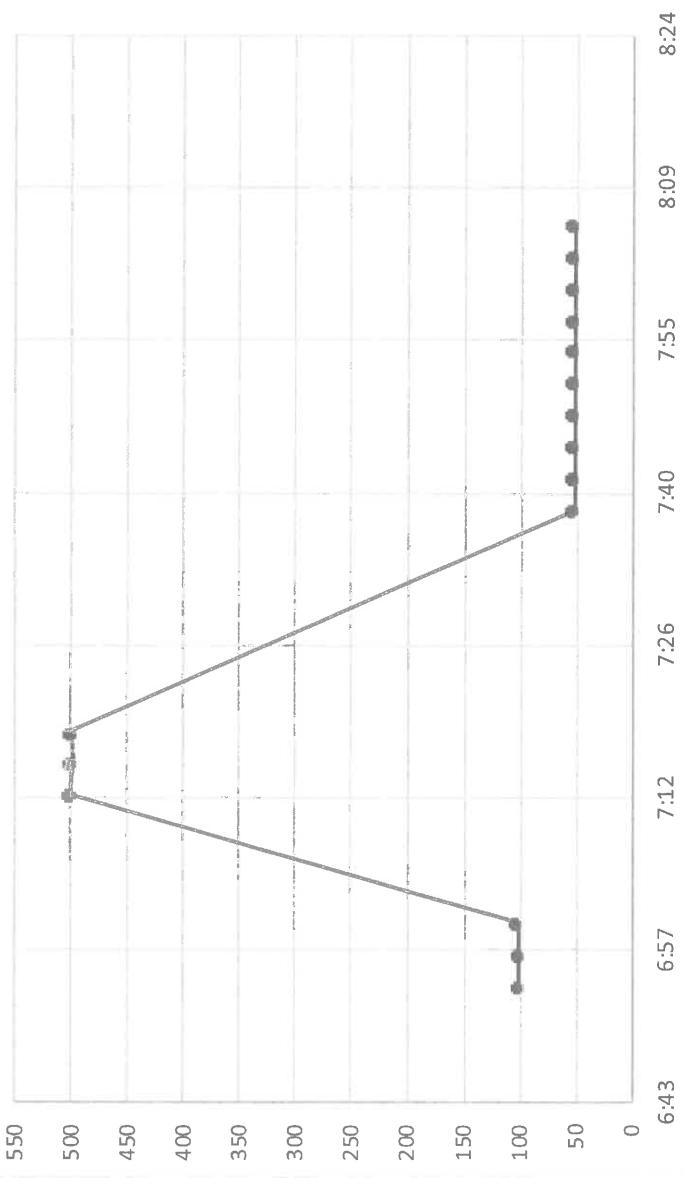
	Sample ID	Data	Units
1	594	14.9713	Area
2	595	14.9142	Area
3	596	14.259	Area
4	597	14.4209	Area
5	598	14.104	Area
6	599	14.186	Area
7	600	14.16	Area
# of data Points		7	

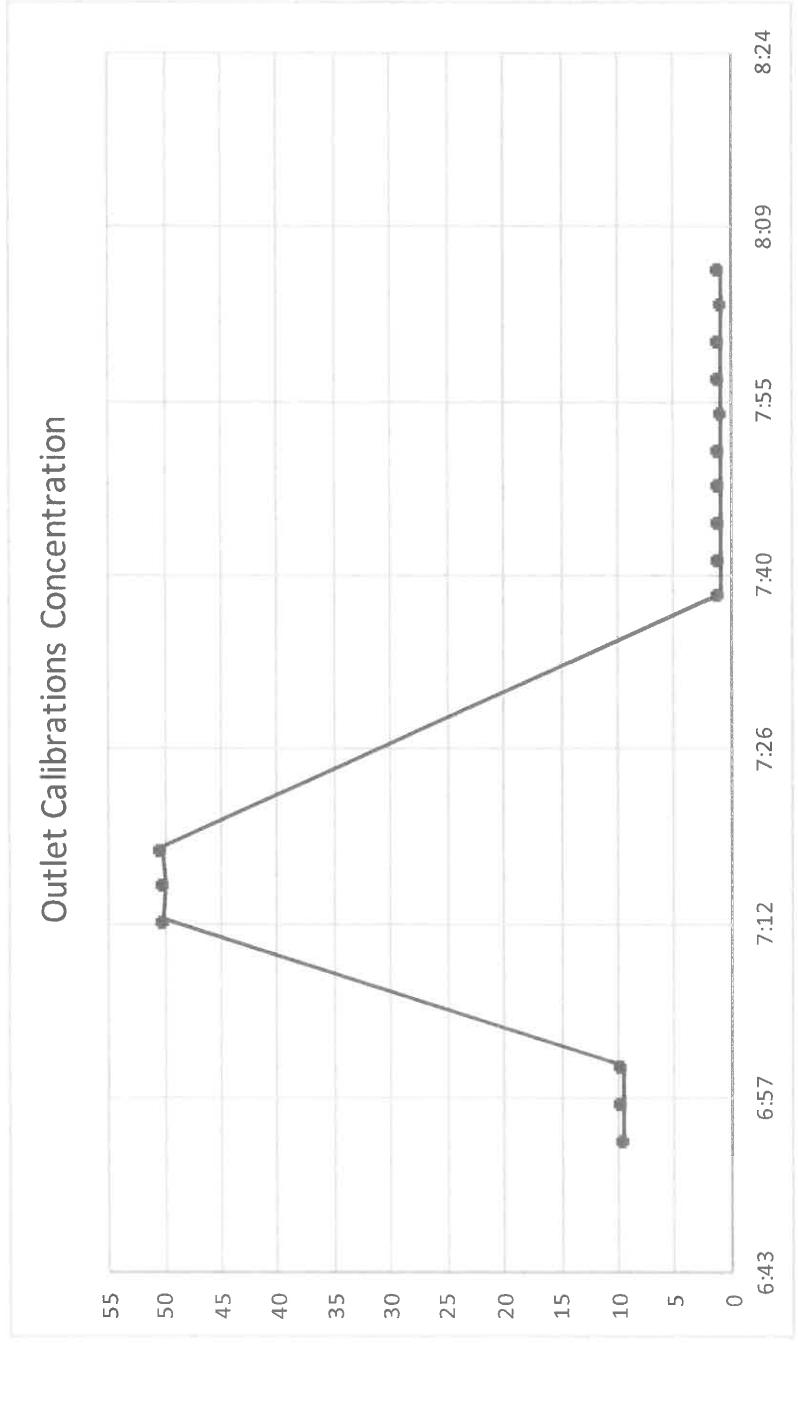
Standard Deviation	0.364117
Least-squares X-Intercept	0.148003
Least-squares Y-Intercept	-2.26
Least squares Slope	15.27
Limit of Detection (LOD)	0.663546

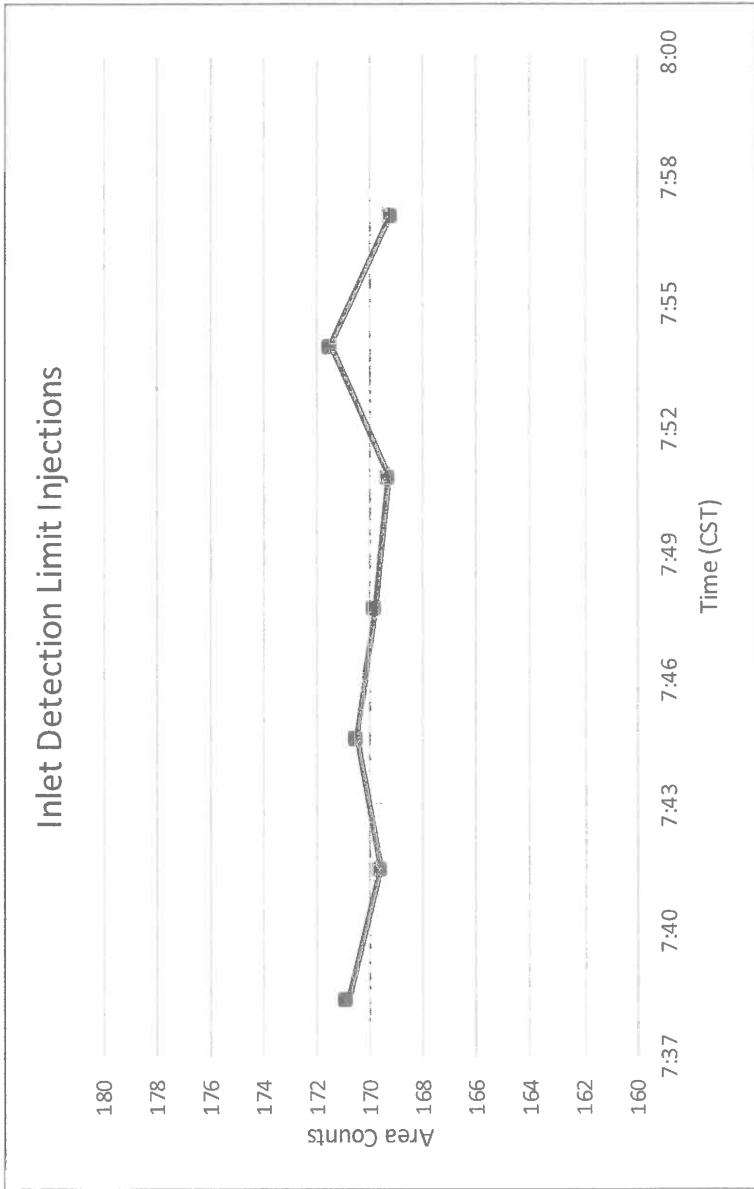
			RT	AC	Calc Conc	Cert Conc	RF	
GP_Out_579.	5/30/19	6:54:18	Ethylene Oxide	2.173	145.0803	9.531024	10	14.50803
GP_Out_580.	5/30/19	6:57:18	Ethylene Oxide	2.17	145.9582	9.588698	10	14.59582
GP_Out_581.	5/30/19	7:00:18	Ethylene Oxide	2.17	145.7054	9.57209	10	14.57054
GP_Out_585.	5/30/19	7:12:18	Ethylene Oxide	2.166	762.6272	50.10066	50	15.25254
GP_Out_586.	5/30/19	7:15:18	Ethylene Oxide	2.166	760.2434	49.94405	50	15.20487
GP_Out_587.	5/30/19	7:18:18	Ethylene Oxide	2.173	764.4316	50.2192	50	15.28863
GP_Out_594.	5/30/19	7:39:18	Ethylene Oxide	2.156	16.9713	1.114927	1	16.9713
GP_Out_595.	5/30/19	7:42:18	Ethylene Oxide	2.16	14.9142	0.979786	1	14.9142
GP_Out_596.	5/30/19	7:45:18	Ethylene Oxide	2.166	14.259	0.936742	1	14.259
GP_Out_597.	5/30/19	7:48:18	Ethylene Oxide	2.16	14.4209	0.947378	1	14.4209
GP_Out_598.	5/30/19	7:51:19	Ethylene Oxide	2.16	14.104	0.92656	1	14.104
GP_Out_599.	5/30/19	7:54:19	Ethylene Oxide	2.163	14.186	0.931947	1	14.186
GP_Out_600.	5/30/19	7:57:19	Ethylene Oxide	2.14	14.16	0.930239	1	14.16
GP_Out_601.	5/30/19	8:00:19	Ethylene Oxide	2.153	14.395	0.945677	1	14.395
GP_Out_602.	5/30/19	8:03:19	Ethylene Oxide	2.16	12.772	0.839054	1	12.772
GP_Out_603.	5/30/19	8:06:19	Ethylene Oxide	2.163	13.7914	0.906024	1	13.7914 Spike

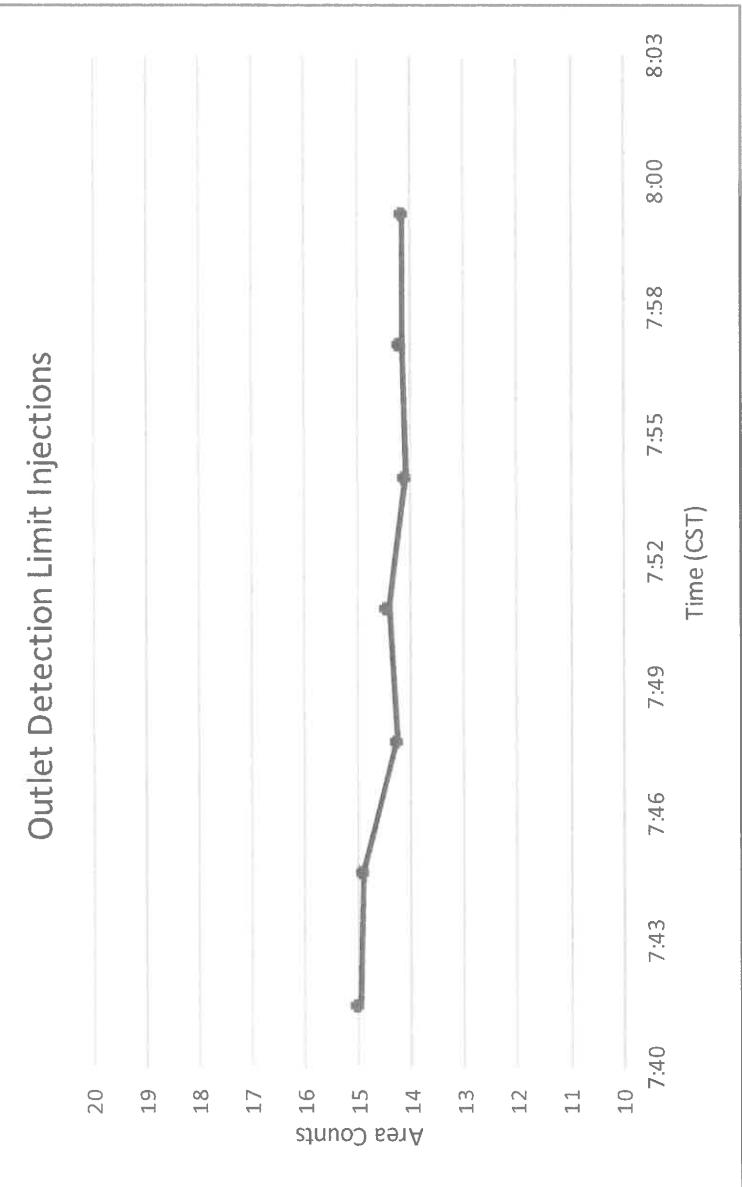
Spike Recovery (%)	0.9580688
--------------------	-----------

Inlet Calibrations Concentration





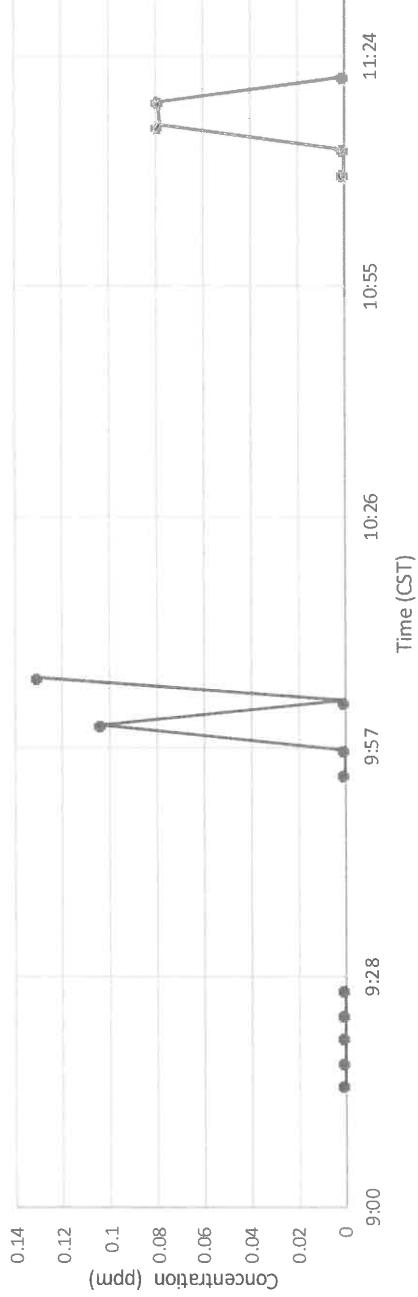




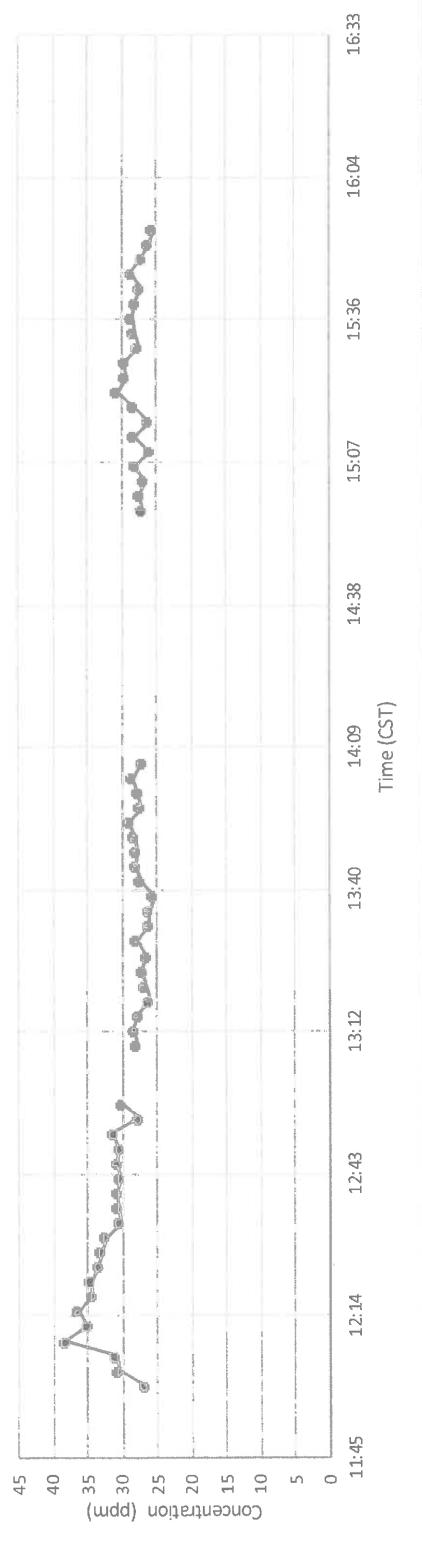
Backvent Inlet Test Runs



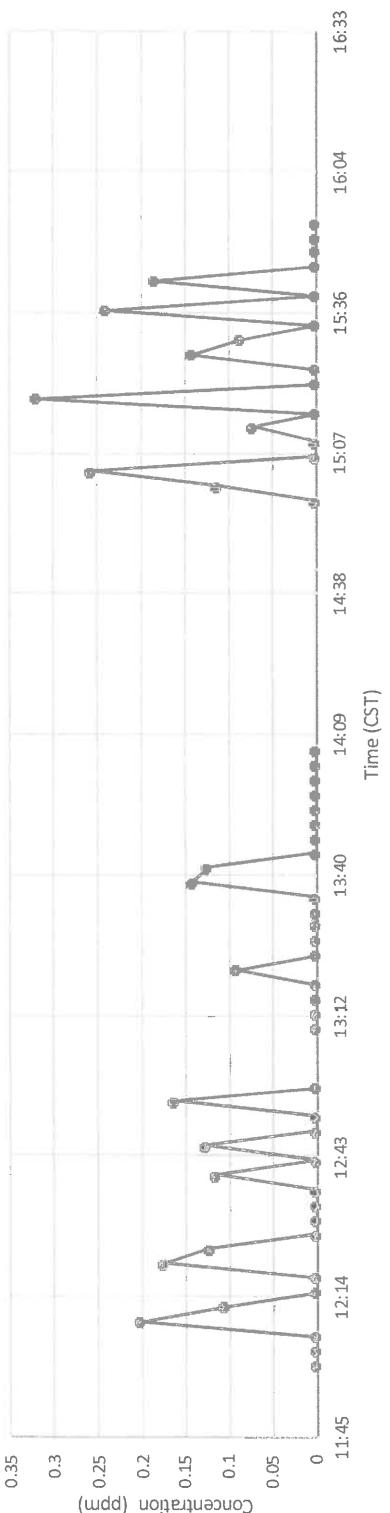
Backvent Outlet Test Runs



Aeration Inlet Test Runs



Aeration Outlet Test Runs



Inlet

				RT	Area	Conc
GP_in_579.	5/30/19	6:54:18	ETO_IN	2.05	331.5597	101.422318
GP_in_580.	5/30/19	6:57:18	ETO_IN	2.046	331.8566	101.513138
GP_in_581.	5/30/19	7:00:18	ETO_IN	2.046	332.7167	101.776238
GP_in_582.	5/30/19	7:03:18	ETO_IN	2.046	332.1738	101.610168
GP_in_583.	5/30/19	7:06:18	ETO_IN	2.043	331.9394	101.538466
GP_in_584.	5/30/19	7:09:18	ETO_IN	2.043	1622.4367	496.294607
GP_in_585.	5/30/19	7:12:18	ETO_IN	2.043	1633.2633	499.606405
GP_in_586.	5/30/19	7:15:18	ETO_IN	2.043	1631.757	499.145636
GP_in_587.	5/30/19	7:18:18	ETO_IN	2.053	1633.4297	499.657306
GP_in_588.	5/30/19	7:21:18	ETO_IN	2.046	1640.0882	501.694105
GP_in_589.	5/30/19	7:24:18	ETO_IN	2.05	1636.0052	500.445138
GP_in_590.	5/30/19	7:27:18	ETO_IN	2.06	157.609	48.2117402
GP_in_591.	5/30/19	7:30:18	ETO_IN	2.06	154.043	47.1209201
GP_out_592.	5/30/19	7:33:18	ETO_IN	2.056	153.3077	46.8959958
GP_in_593.	5/30/19	7:36:18	ETO_IN	2.056	153.9322	47.087027
GP_in_594.	5/30/19	7:39:18	ETO_IN	2.046	170.8592	52.2649047
GP_in_595.	5/30/19	7:42:18	ETO_IN	2.05	169.6242	51.8871249
GP_in_596.	5/30/19	7:45:18	ETO_IN	2.053	170.4842	52.1501942
GP_in_597.	5/30/19	7:48:18	ETO_IN	2.05	169.7866	51.9368022
GP_in_598.	5/30/19	7:51:19	ETO_IN	2.046	169.2921	51.7855373
GP_in_599.	5/30/19	7:54:19	ETO_IN	2.046	171.5234	52.4680799
GP_in_600.	5/30/19	7:57:19	ETO_IN	2.05	169.2164	51.7623811
GP_in_601.	5/30/19	8:00:19	ETO_IN	2.043	169.4066	51.8205622
GP_in_602.	5/30/19	8:03:19	ETO_IN	2.043	169.4987	51.8487351
GP_in_603.	5/30/19	8:06:19	ETO_IN	2.05	169.2838	51.7829984
GP_in_604.	5/30/19	8:09:19	ETO_IN	2.053	169.0046	51.6975926
GP_in_605.	5/30/19	8:12:19	ETO_IN	2.043	170.2287	52.0720382
GP_in_606.	5/30/19	8:15:19	ETO_IN	2.046	168.2856	51.4776544
GP_in_607.	5/30/19	8:18:19	ETO_IN	2.05	170.1242	52.0400722
GP_in_608.	5/30/19	8:21:19	ETO_IN	2.046	168.7214	51.6109633
GP_in_609.	5/30/19	8:24:20	ETO_IN	2.046	169.5576	51.8667523
GP_in_610.	5/30/19	8:27:20	ETO_IN	2.053	117.7336	36.0140712
GP_in_611.	5/30/19	8:30:20	ETO_IN	2.053	129.8117	39.7086966
GP_in_612.	5/30/19	8:33:20	ETO_IN	2.046	136.63	41.7943777
GP_in_613.	5/30/19	8:36:20	ETO_IN	2.043	141.8062	43.3777492
GP_in_614.	5/30/19	8:39:20	ETO_IN	2.056	9.9194	3.03429078
GP_in_615.	5/30/19	8:42:20	ETO_IN	2.046	169.9383	51.9832064
GP_in_616.	5/30/19	8:45:20	ETO_IN	2.05	170.9705	52.2989508
GP_in_617.	5/30/19	8:48:20	ETO_IN	1.99	9.5866	2.93248906
GP_in_618.	5/30/19	8:51:20	ETO_IN	2.116	95.5951	29.2420238
GP_in_619.	5/30/19	8:54:20	ETO_IN	2.05	92.4646	28.2844208
GP_in_620.	5/30/19	8:57:20	ETO_IN	2.043	96.0428	29.3789728
GP_in_621.	5/30/19	9:00:21	ETO_IN	2.046	99.2132	30.348781
GP_in_622.	5/30/19	9:03:21	ETO_IN	2.04	95.6298	29.2526383
GP_in_623.	5/30/19	9:06:21	ETO_IN	2.036	94.1014	28.7851091

Inlet

GP in 624.	5/30/19	9:09:21	ETO IN	2.046	90.1371	27.5724511
GP in 625.	5/30/19	9:12:21	ETO IN	2.04	93.141	28.4913279
GP in 626.	5/30/19	9:15:21	ETO IN	2.04	85.7955	26.2443792
GP in 627.	5/30/19	9:18:21	ETO IN	2.04	96.7076	29.5823315
GP in 628.	5/30/19	9:21:21	ETO IN	2.043	91.3954	27.9573583
GP in 629.	5/30/19	9:24:21	ETO IN	2.033	92.0806	28.1669573
GP in 630.	5/30/19	9:27:21	ETO IN	2.036	95.9174	29.3406136
Average						28.258328
GP in 631.	5/30/19	9:30:21	ETO IN	2.043	100.2572	30.668135
GP in 632.	5/30/19	9:33:22	ETO IN	2.036	100.5806	30.7670613
GP in 633.	5/30/19	9:36:22	ETO IN	2.036	331.5151	101.408675
GP in 634.	5/30/19	9:39:22	ETO IN	2.043	105.473	32.26362
GP in 635.	5/30/19	9:42:22	ETO IN	2.043	102.5226	31.3611086
GP in 636.	5/30/19	9:45:22	ETO IN	2.04	103.3816	31.623872
GP in 637.	5/30/19	9:48:22	ETO IN	2.043	102.54	31.3664311
GP in 638.	5/30/19	9:51:22	ETO IN	2.046	115.7693	35.4132024
GP in 639.	5/30/19	9:54:22	ETO IN	2.04	264.9339	81.0418464
GP in 640.	5/30/19	9:57:22	ETO IN	2.036	122.6516	37.5184607
GP in 641.	5/30/19	10:00:22	ETO IN	2.043	111.1674	34.0055061
GP in 642.	5/30/19	10:03:22	ETO IN	2.046	108.232	33.1075831
GP in 643.	5/30/19	10:06:22	ETO IN	2.036	107.9588	33.0240127
Average						43.7394818
GP in 644.	5/30/19	10:09:23	ETO IN	2.036	107.1185	32.7669695
GP in 645.	5/30/19	10:12:23	ETO IN	2.04	102.7485	31.4302101
GP in 646.	5/30/19	10:15:23	ETO IN	2.036	330.7344	101.169863
GP in 647.	5/30/19	10:18:23	ETO IN	2.036	99.5912	30.4644092
GP in 648.	5/30/19	10:21:23	ETO IN	2.043	106.5784	32.6017558
GP in 649.	5/30/19	10:24:23	ETO IN	2.043	106.8346	32.680126
GP in 650.	5/30/19	10:27:23	ETO IN	2.033	105.2224	32.1869628
GP in 651.	5/30/19	10:30:23	ETO IN	2.04	104.4566	31.9527087
GP in 652.	5/30/19	10:33:23	ETO IN	2.043	103.229	31.5771925
GP in 653.	5/30/19	10:36:23	ETO IN	2.036	102.2196	31.2684225
GP in 654.	5/30/19	10:39:23	ETO IN	2.036	105.5958	32.3011838
GP in 655.	5/30/19	10:42:24	ETO IN	2.043	102.596	31.3835612
GP in 656.	5/30/19	10:45:24	ETO IN	2.043	97.1887	29.7294974
GP in 657.	5/30/19	10:48:24	ETO IN	2.033	101.3156	30.9918938
GP in 658.	5/30/19	10:51:24	ETO IN	2.036	101.5573	31.0658285
GP in 659.	5/30/19	10:54:24	ETO IN	2.046	100.9892	30.8920498
GP in 660.	5/30/19	10:57:24	ETO IN	2.04	99.7366	30.5088862
GP in 661.	5/30/19	11:00:24	ETO IN	2.036	108.9683	33.3328133
GP in 662.	5/30/19	11:03:24	ETO IN	2.043	107.5446	32.8973112
GP in 663.	5/30/19	11:06:24	ETO IN	2.043	101.6374	31.0903307
GP in 664.	5/30/19	11:09:24	ETO IN	2.043	104.6696	32.0178642
GP in 665.	5/30/19	11:12:24	ETO IN	2.043	210.0651	64.2577774
GP in 666.	5/30/19	11:15:24	ETO IN	2.043	95.956	29.3524212
GP in 667.	5/30/19	11:18:24	ETO IN	2.046	92.9172	28.4228687

Inlet

GP_in_668.	5/30/19	11:21:24	ETO_IN	2.043	90.7044	27.7459851
Average						36.3593833
GP_in_669.	5/30/19	11:24:24	ETO_IN	2.04	95.7126	29.2779664
GP_in_670.	5/30/19	11:27:24	ETO_IN	2.04	98.4313	30.109602
GP_in_671.	5/30/19	11:30:24	ETO_IN	2.04	330.1972	101.005537
GP_in_672.	5/30/19	11:33:24	ETO_IN	2.043	100.3795	30.7055459
GP_in_673.	5/30/19	11:36:24	ETO_IN	2.043	97.2066	29.7349729
GP_in_674.	5/30/19	11:39:24	ETO_IN	2.046	94.3382	28.8575449
GP_in_675.	5/30/19	11:42:24	ETO_IN	2.05	96.5328	29.5288612
GP_in_676.	5/30/19	11:45:24	ETO_IN	2.05	93.2208	28.5157383
GP_in_677.	5/30/19	11:48:24	ETO_IN	2.05	90.1622	27.5801291
GP_in_678.	5/30/19	11:51:24	ETO_IN	2.043	85.5942	26.1828026
GP_in_679.	5/30/19	11:54:24	ETO_IN	2.043	85.7492	26.2302163
GP_in_680.	5/30/19	11:57:24	ETO_IN	2.04	89.9041	27.5011777
GP_in_681.	5/30/19	12:00:24	ETO_IN	2.04	87.7193	26.8328592
GP_in_682.	5/30/19	12:03:24	ETO_IN	2.04	100.037	30.600777
GP_in_683.	5/30/19	12:06:24	ETO_IN	2.04	101.0667	30.9157566
GP_in_684.	5/30/19	12:09:24	ETO_IN	2.043	125.181	38.2921905
GP_in_685.	5/30/19	12:12:24	ETO_IN	2.036	114.4288	35.0031507
GP_in_686.	5/30/19	12:15:24	ETO_IN	2.043	118.4718	36.2398825
GP_in_687.	5/30/19	12:18:24	ETO_IN	2.046	112.4486	34.3974182
GP_in_688.	5/30/19	12:21:24	ETO_IN	2.05	112.7884	34.5013612
GP_in_689.	5/30/19	12:24:24	ETO_IN	2.05	109.1758	33.3962864
GP_in_690.	5/30/19	12:27:24	ETO_IN	2.05	107.6183	32.9198556
GP_in_691.	5/30/19	12:30:24	ETO_IN	2.05	105.602	32.3030804
GP_in_692.	5/30/19	12:33:24	ETO_IN	2.05	98.7393	30.2038176
GP_in_693.	5/30/19	12:36:24	ETO_IN	2.053	100.0425	30.6024594
GP_in_694.	5/30/19	12:39:24	ETO_IN	2.043	100.2522	30.6666055
GP_in_695.	5/30/19	12:42:24	ETO_IN	2.043	98.8101	30.2254749
GP_in_696.	5/30/19	12:45:24	ETO_IN	2.043	100.5324	30.7523172
GP_in_697.	5/30/19	12:48:24	ETO_IN	2.043	99.3874	30.4020678
GP_in_698.	5/30/19	12:51:24	ETO_IN	2.04	102.337	31.3043345
GP_in_699.	5/30/19	12:54:24	ETO_IN	2.043	90.2071	27.5938638
GP_in_700.	5/30/19	12:57:24	ETO_IN	2.046	98.4158	30.1048607
Average						31.862921
GP_in_701.	5/30/19	13:00:24	ETO_IN	2.05	94.0942	28.7829066
GP_in_702.	5/30/19	13:03:24	ETO_IN	2.036	332.1632	101.606925
GP_in_703.	5/30/19	13:06:25	ETO_IN	2.05	95.2972	29.1508978
GP_in_704.	5/30/19	13:09:25	ETO_IN	2.05	90.9094	27.8086935
GP_in_705.	5/30/19	13:12:25	ETO_IN	2.05	92.4744	28.2874186
GP_in_706.	5/30/19	13:15:25	ETO_IN	2.046	90.7248	27.7522254
GP_in_707.	5/30/19	13:18:25	ETO_IN	2.036	84.8665	25.9602031
GP_in_708.	5/30/19	13:21:25	ETO_IN	2.043	86.9273	26.5905907
GP_in_709.	5/30/19	13:24:25	ETO_IN	2.04	88.7384	27.1445964
GP_in_710.	5/30/19	13:27:25	ETO_IN	2.046	86.2802	26.3926463
GP_in_711.	5/30/19	13:30:25	ETO_IN	2.043	90.777	27.7681931

Inlet

GP_in_712.	5/30/19	13:33:25	ETO_IN	2.05	85.6528	26.200728
GP_in_713.	5/30/19	13:36:25	ETO_IN	2.05	85.2118	26.0658285
GP_in_714.	5/30/19	13:39:25	ETO_IN	2.05	82.8386	25.3398795
GP_in_715.	5/30/19	13:42:25	ETO_IN	2.05	89.1592	27.2733168
GP_in_716.	5/30/19	13:45:25	ETO_IN	2.05	91.2658	27.9177144
GP_in_717.	5/30/19	13:48:25	ETO_IN	2.046	90.8761	27.7985072
GP_in_718.	5/30/19	13:51:25	ETO_IN	2.05	91.8755	28.1042183
GP_in_719.	5/30/19	13:54:25	ETO_IN	2.04	94.2202	28.8214493
GP_in_720.	5/30/19	13:57:25	ETO_IN	2.043	89.0064	27.2265761
GP_in_721.	5/30/19	14:00:25	ETO_IN	2.043	90.3042	27.6235661
GP_in_722.	5/30/19	14:03:25	ETO_IN	2.046	93.0332	28.4583525
GP_in_723.	5/30/19	14:06:25	ETO_IN	2.046	88.4738	27.0636567
Average						27.279918
GP_in_724.	5/30/19	14:09:25	ETO_IN	2.046	87.1732	26.6658102
GP_in_725.	5/30/19	14:12:25	ETO_IN	2.046	86.1425	26.3505246
GP_in_726.	5/30/19	14:15:25	ETO_IN	2.043	88.478	27.0649414
GP_in_727.	5/30/19	14:18:25	ETO_IN	2.043	84.4044	25.8188492
GP_in_728.	5/30/19	14:21:25	ETO_IN	2.043	88.9525	27.2100884
GP_in_729.	5/30/19	14:24:25	ETO_IN	2.046	89.3424	27.3293567
GP_in_730.	5/30/19	14:27:25	ETO_IN	2.05	93.1598	28.4970787
GP_in_731.	5/30/19	14:30:25	ETO_IN	2.053	105.3049	32.2121991
GP_in_732.	5/30/19	14:33:25	ETO_IN	2.04	92.3012	28.2344376
GP_in_733.	5/30/19	14:36:25	ETO_IN	2.043	89.2716	27.3076994
GP_in_734.	5/30/19	14:39:25	ETO_IN	2.046	89.3763	27.3397265
GP_in_735.	5/30/19	14:42:26	ETO_IN	2.036	328.2428	100.407696
GP_in_736.	5/30/19	14:45:26	ETO_IN	2.04	94.2078	28.8176562
GP_in_737.	5/30/19	14:48:26	ETO_IN	2.046	87.9684	26.9090575
GP_in_738.	5/30/19	14:51:26	ETO_IN	2.046	85.4546	26.1400997
GP_in_739.	5/30/19	14:54:26	ETO_IN	2.043	85.8042	26.2470405
GP_in_740.	5/30/19	14:57:26	ETO_IN	2.04	88.0344	26.9292466
GP_in_741.	5/30/19	15:00:26	ETO_IN	2.043	89.3358	27.3273378
GP_in_742.	5/30/19	15:03:26	ETO_IN	2.04	87.0276	26.6212719
GP_in_743.	5/30/19	15:06:26	ETO_IN	2.043	91.3667	27.9485791
GP_in_744.	5/30/19	15:09:26	ETO_IN	2.043	84.4684	25.8384265
GP_in_745.	5/30/19	15:12:26	ETO_IN	2.046	92.1234	28.1800496
GP_in_746.	5/30/19	15:15:26	ETO_IN	2.036	85.1258	26.0395216
GP_in_747.	5/30/19	15:18:26	ETO_IN	2.033	91.793	28.078982
GP_in_748.	5/30/19	15:21:26	ETO_IN	2.046	99.7802	30.5222232
GP_in_749.	5/30/19	15:24:26	ETO_IN	2.043	96.0804	29.3904744
GP_in_750.	5/30/19	15:27:26	ETO_IN	2.033	96.637	29.5607354
GP_in_751.	5/30/19	15:30:26	ETO_IN	2.033	89.8254	27.4771038
GP_in_752.	5/30/19	15:33:26	ETO_IN	2.033	91.8557	28.0981616
GP_in_753.	5/30/19	15:36:26	ETO_IN	2.043	92.9708	28.4392646
GP_in_754.	5/30/19	15:39:26	ETO_IN	2.043	91.6068	28.0220244
GP_in_755.	5/30/19	15:42:26	ETO_IN	2.04	88.923	27.2010645
GP_in_756.	5/30/19	15:45:26	ETO_IN	2.046	93.6434	28.6450093

Inlet

GP_in_757.	5/30/19	15:48:27	ETO_IN	2.04	88.3268	27.0186902
GP_in_758.	5/30/19	15:51:27	ETO_IN	2.04	85.2708	26.0838763
GP_in_759.	5/30/19	15:54:27	ETO_IN	2.036	83.0814	25.4141507
Average						27.6418097
GP_in_760.	5/30/19	15:57:27	ETO_IN	2.036	86.6168	26.4956104
GP_in_761.	5/30/19	16:00:27	ETO_IN	2.036	75.628	23.134196
GP_in_762.	5/30/19	16:03:27	ETO_IN	2.033	328.8328	100.588174
GP_in_763.	5/30/19	16:06:27	ETO_IN	2.04	331.065	101.270992
GP_in_764.	5/30/19	16:09:27	ETO_IN	2.043	331.9372	101.537793

Outlet

					RT	Area	Conc
GP Out 579.	5/30/19	6:54:18	Methane	Ethylene Oxide	2.173	145.0803	9.53102
GP Out 580.	5/30/19	6:57:18	Methane	Ethylene Oxide	2.17	145.9582	9.5887
GP Out 581.	5/30/19	7:00:18	Methane	Ethylene Oxide	2.17	145.7054	9.57209
GP Out 582.	5/30/19	7:03:18	Methane	Ethylene Oxide	2.166	147.2432	9.67312
GP Out 583.	5/30/19	7:06:18	Methane	Ethylene Oxide	2.166	147.1936	9.66986
GP Out 584.	5/30/19	7:09:18	Methane	Ethylene Oxide	2.166	763.9896	50.1902
GP Out 585.	5/30/19	7:12:18	Methane	Ethylene Oxide	2.166	762.6272	50.1007
GP Out 586.	5/30/19	7:15:18	Methane	Ethylene Oxide	2.166	760.2434	49.9441
GP Out 587.	5/30/19	7:18:18	Methane	Ethylene Oxide	2.173	764.4316	50.2192
GP Out 588.	5/30/19	7:21:18	Methane	Ethylene Oxide	2.163	760.561	49.9649
GP Out 589.	5/30/19	7:24:18	Methane	Ethylene Oxide	2.17	762.4888	50.0916
GP Out 590.	5/30/19	7:27:18	Methane	Ethylene Oxide	0	0	0
GP Out 591.	5/30/19	7:30:18	Methane	Ethylene Oxide	0	0	0
GP Out 592.	5/30/19	7:33:18	Methane	Ethylene Oxide	2.123	4.9642	0.32612
GP Out 593.	5/30/19	7:36:18	Methane	Ethylene Oxide	2.126	3.3143	0.21773
GP Out 594.	5/30/19	7:39:18	Methane	Ethylene Oxide	2.156	14.9713	0.98354
GP Out 595.	5/30/19	7:42:18	Methane	Ethylene Oxide	2.16	14.9142	0.97979
GP Out 596.	5/30/19	7:45:18	Methane	Ethylene Oxide	2.166	14.259	0.93674
GP Out 597.	5/30/19	7:48:18	Methane	Ethylene Oxide	2.16	14.4209	0.94738
GP Out 598.	5/30/19	7:51:19	Methane	Ethylene Oxide	2.16	14.104	0.92656
GP Out 599.	5/30/19	7:54:19	Methane	Ethylene Oxide	2.163	14.186	0.93195
GP Out 600.	5/30/19	7:57:19	Methane	Ethylene Oxide	2.14	14.16	0.93024
GP Out 601.	5/30/19	8:00:19	Methane	Ethylene Oxide	2.153	14.395	0.94568
GP Out 602.	5/30/19	8:03:19	Methane	Ethylene Oxide	2.16	12.772	0.83905
GP Out 603.	5/30/19	8:06:19	Methane	Ethylene Oxide	2.163	13.7914	0.90602
GP Out 604.	5/30/19	8:09:19	Methane	Ethylene Oxide	2.163	6.8838	0.45223
GP Out 605.	5/30/19	8:12:19	Methane	Ethylene Oxide	0	0	0
GP Out 606.	5/30/19	8:15:19	Methane	Ethylene Oxide	2.18	14.5033	0.95279
GP Out 607.	5/30/19	8:18:19	Methane	Ethylene Oxide	2.173	15.2927	1.00465
GP Out 608.	5/30/19	8:21:19	Methane	Ethylene Oxide	2.17	18.0648	1.18676
GP Out 609.	5/30/19	8:24:20	Methane	Ethylene Oxide	2.183	13.4322	0.88243
GP Out 610.	5/30/19	8:27:20	Methane	Ethylene Oxide	2.193	1.2636	0.08301
GP Out 611.	5/30/19	8:30:20	Methane	Ethylene Oxide	2.18	2.4068	0.15811
GP Out 612.	5/30/19	8:33:20	Methane	Ethylene Oxide	2.16	1.3712	0.09008
GP Out 613.	5/30/19	8:36:20	Methane	Ethylene Oxide	0	0	0
GP Out 614.	5/30/19	8:39:20	Methane	Ethylene Oxide	2.17	14.3752	0.94438
GP Out 615.	5/30/19	8:42:20	Methane	Ethylene Oxide	2.153	14.0358	0.92208
GP Out 616.	5/30/19	8:45:20	Methane	Ethylene Oxide	2.173	14.6573	0.96291
GP Out 617.	5/30/19	8:48:20	Methane	Ethylene Oxide	2.083	9.5118	0.62488
GP Out 618.	5/30/19	8:51:20	Methane	Ethylene Oxide	0	0	0
GP Out 619.	5/30/19	8:54:20	Methane	Ethylene Oxide	2.06	6.5625	0.43112
GP Out 620.	5/30/19	8:57:20	Methane	Ethylene Oxide	0	0	0
GP Out 621.	5/30/19	9:00:21	Methane	Ethylene Oxide	2.23	1.1949	0.0785
GP Out 622.	5/30/19	9:03:21	Methane	Ethylene Oxide	0	0	0
GP Out 623.	5/30/19	9:06:21	Methane	Ethylene Oxide	0	0	0

Outlet

GP Out 624.	5/30/19	9:09:21	Methane	Ethylene Oxide	2.176	1.3564	0.08911
GP Out 625.	5/30/19	9:12:21	Methane	Ethylene Oxide	0	0	0
GP Out 626.	5/30/19	9:15:21	Methane	Ethylene Oxide	0	0	0
GP Out 627.	5/30/19	9:18:21	Methane	Ethylene Oxide	0	0	0
GP Out 628.	5/30/19	9:21:21	Methane	Ethylene Oxide	0	0	0
GP Out 629.	5/30/19	9:24:21	Methane	Ethylene Oxide	0	0	0
GP Out 630.	5/30/19	9:27:21	Methane	Ethylene Oxide	0	0	0
Average							0
GP Out 631.	5/30/19	9:30:21	Methane	Ethylene Oxide	0	0	0
GP Out 632.	5/30/19	9:33:22	Methane	Ethylene Oxide	0	0	0
GP Out 633.	5/30/19	9:36:22	Methane	Ethylene Oxide	2.143	144.5976	9.49931
GP Out 634.	5/30/19	9:39:22	Methane	Ethylene Oxide	0	0	0
GP Out 635.	5/30/19	9:42:22	Methane	Ethylene Oxide	0	0	0
GP Out 636.	5/30/19	9:45:22	Methane	Ethylene Oxide	0	0	0
GP Out 637.	5/30/19	9:48:22	Methane	Ethylene Oxide	0	0	0
GP Out 638.	5/30/19	9:51:22	Methane	Ethylene Oxide	0	0	0
GP Out 639.	5/30/19	9:54:22	Methane	Ethylene Oxide	0	0	0
GP Out 640.	5/30/19	9:57:22	Methane	Ethylene Oxide	0	0	0
GP Out 641.	5/30/19	10:00:22	Methane	Ethylene Oxide	2.18	1.5792	0.10375
GP Out 642.	5/30/19	10:03:22	Methane	Ethylene Oxide	0	0	0
GP Out 643.	5/30/19	10:06:22	Methane	Ethylene Oxide	2.153	1.9733	0.12964
Average							0.04668
GP Out 644.	5/30/19	10:09:23	Methane	Ethylene Oxide	0	0	0
GP Out 645.	5/30/19	10:12:23	Methane	Ethylene Oxide	0	0	0
GP Out 646.	5/30/19	10:15:23	Methane	Ethylene Oxide	2.15	144.571	9.49757
GP Out 647.	5/30/19	10:18:23	Methane	Ethylene Oxide	2.126	2.1886	0.14378
GP Out 648.	5/30/19	10:21:23	Methane	Ethylene Oxide	0	0	0
GP Out 649.	5/30/19	10:24:23	Methane	Ethylene Oxide	2.196	1.3177	0.08657
GP Out 650.	5/30/19	10:27:23	Methane	Ethylene Oxide	2.163	2.0232	0.13291
GP Out 651.	5/30/19	10:30:23	Methane	Ethylene Oxide	0	0	0
GP Out 652.	5/30/19	10:33:23	Methane	Ethylene Oxide	2.166	1.223	0.08034
GP Out 653.	5/30/19	10:36:23	Methane	Ethylene Oxide	0	0	0
GP Out 654.	5/30/19	10:39:23	Methane	Ethylene Oxide	2.14	1.2984	0.0853
GP Out 655.	5/30/19	10:42:24	Methane	Ethylene Oxide	0	0	0
GP Out 656.	5/30/19	10:45:24	Methane	Ethylene Oxide	2.163	1.3748	0.09032
GP Out 657.	5/30/19	10:48:24	Methane	Ethylene Oxide	0	0	0
GP Out 658.	5/30/19	10:51:24	Methane	Ethylene Oxide	0	0	0
GP Out 659.	5/30/19	10:54:24	Methane	Ethylene Oxide	2.183	1.8617	0.1223
GP Out 660.	5/30/19	10:57:24	Methane	Ethylene Oxide	2.173	1.0541	0.06925
GP Out 661.	5/30/19	11:00:24	Methane	Ethylene Oxide	0	0	0
GP Out 662.	5/30/19	11:03:24	Methane	Ethylene Oxide	0	0	0
GP Out 663.	5/30/19	11:06:24	Methane	Ethylene Oxide	0	0	0
GP Out 664.	5/30/19	11:09:24	Methane	Ethylene Oxide	0	0	0
GP Out 665.	5/30/19	11:12:24	Methane	Ethylene Oxide	0	0	0
GP Out 666.	5/30/19	11:15:24	Methane	Ethylene Oxide	2.173	1.19	0.07818
GP Out 667.	5/30/19	11:18:24	Methane	Ethylene Oxide	2.18	1.196	0.07857

Outlet

GP Out 668.	5/30/19	11:21:24	Methane	Ethylene Oxide	0	0	0
Average							0.03135
GP Out 669.	5/30/19	11:24:24	Methane	Ethylene Oxide	0	0	0
GP Out 670.	5/30/19	11:27:24	Methane	Ethylene Oxide	0	0	0
GP Out 671.	5/30/19	11:30:24	Methane	Ethylene Oxide	2.15	147.2033	9.67049
GP Out 672.	5/30/19	11:33:24	Methane	Ethylene Oxide	2.16	1.5274	0.10034
GP Out 673.	5/30/19	11:36:24	Methane	Ethylene Oxide	2.203	1.71	0.11234
GP Out 674.	5/30/19	11:39:24	Methane	Ethylene Oxide	0	0	0
GP Out 675.	5/30/19	11:42:24	Methane	Ethylene Oxide	0	0	0
GP Out 676.	5/30/19	11:45:24	Methane	Ethylene Oxide	0	0	0
GP Out 677.	5/30/19	11:48:24	Methane	Ethylene Oxide	2.176	1.1709	0.07692
GP Out 678.	5/30/19	11:51:24	Methane	Ethylene Oxide	0	0	0
GP Out 679.	5/30/19	11:54:24	Methane	Ethylene Oxide	0	0	0
GP Out 680.	5/30/19	11:57:24	Methane	Ethylene Oxide	0	0	0
GP Out 681.	5/30/19	12:00:24	Methane	Ethylene Oxide	0	0	0
GP Out 682.	5/30/19	12:03:24	Methane	Ethylene Oxide	0	0	0
GP Out 683.	5/30/19	12:06:24	Methane	Ethylene Oxide	0	0	0
GP Out 684.	5/30/19	12:09:24	Methane	Ethylene Oxide	2.18	3.0464	0.20013
GP Out 685.	5/30/19	12:12:24	Methane	Ethylene Oxide	2.173	1.6166	0.1062
GP Out 686.	5/30/19	12:15:24	Methane	Ethylene Oxide	0	0	0
GP Out 687.	5/30/19	12:18:24	Methane	Ethylene Oxide	0	0	0
GP Out 688.	5/30/19	12:21:24	Methane	Ethylene Oxide	2.15	2.6404	0.17346
GP Out 689.	5/30/19	12:24:24	Methane	Ethylene Oxide	2.17	1.8619	0.12232
GP Out 690.	5/30/19	12:27:24	Methane	Ethylene Oxide	0	0	0
GP Out 691.	5/30/19	12:30:24	Methane	Ethylene Oxide	0	0	0
GP Out 692.	5/30/19	12:33:24	Methane	Ethylene Oxide	0	0	0
GP Out 693.	5/30/19	12:36:24	Methane	Ethylene Oxide	0	0	0
GP Out 694.	5/30/19	12:39:24	Methane	Ethylene Oxide	2.173	1.748	0.11483
GP Out 695.	5/30/19	12:42:24	Methane	Ethylene Oxide	0	0	0
GP Out 696.	5/30/19	12:45:24	Methane	Ethylene Oxide	2.186	1.9387	0.12736
GP Out 697.	5/30/19	12:48:24	Methane	Ethylene Oxide	0	0	0
GP Out 698.	5/30/19	12:51:24	Methane	Ethylene Oxide	0	0	0
GP Out 699.	5/30/19	12:54:24	Methane	Ethylene Oxide	2.183	2.4758	0.16265
GP Out 700.	5/30/19	12:57:24	Methane	Ethylene Oxide	0	0	0
Average							0.05035
GP Out 701.	5/30/19	13:00:24	Methane	Ethylene Oxide	0	0	0
GP Out 702.	5/30/19	13:03:24	Methane	Ethylene Oxide	2.15	144.8978	9.51904
GP Out 703.	5/30/19	13:06:25	Methane	Ethylene Oxide	0	0	0
GP Out 704.	5/30/19	13:09:25	Methane	Ethylene Oxide	0	0	0
GP Out 705.	5/30/19	13:12:25	Methane	Ethylene Oxide	0	0	0
GP Out 706.	5/30/19	13:15:25	Methane	Ethylene Oxide	0	0	0
GP Out 707.	5/30/19	13:18:25	Methane	Ethylene Oxide	0	0	0
GP Out 708.	5/30/19	13:21:25	Methane	Ethylene Oxide	2.05	1.3802	0.09067
GP Out 709.	5/30/19	13:24:25	Methane	Ethylene Oxide	0	0	0
GP Out 710.	5/30/19	13:27:25	Methane	Ethylene Oxide	0	0	0
GP Out 711.	5/30/19	13:30:25	Methane	Ethylene Oxide	0	0	0

Outlet

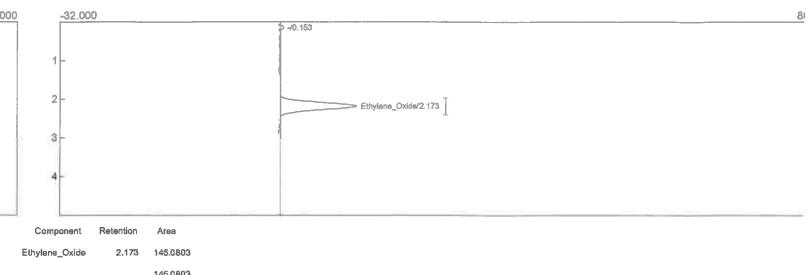
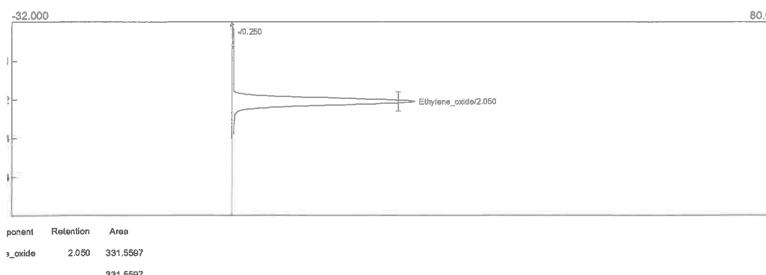
GP Out 712.	5/30/19	13:33:25	Methane	Ethylene Oxide	0	0	0
GP Out 713.	5/30/19	13:36:25	Methane	Ethylene Oxide	0	0	0
GP Out 714.	5/30/19	13:39:25	Methane	Ethylene Oxide	2.173	2.1672	0.14237
GP Out 715.	5/30/19	13:42:25	Methane	Ethylene Oxide	2.19	1.8786	0.12341
GP Out 716.	5/30/19	13:45:25	Methane	Ethylene Oxide	0	0	0
GP Out 717.	5/30/19	13:48:25	Methane	Ethylene Oxide	0	0	0
GP Out 718.	5/30/19	13:51:25	Methane	Ethylene Oxide	0	0	0
GP Out 719.	5/30/19	13:54:25	Methane	Ethylene Oxide	0	0	0
GP Out 720.	5/30/19	13:57:25	Methane	Ethylene Oxide	0	0	0
GP Out 721.	5/30/19	14:00:25	Methane	Ethylene Oxide	0	0	0
GP Out 722.	5/30/19	14:03:25	Methane	Ethylene Oxide	0	0	0
GP Out 723.	5/30/19	14:06:25	Methane	Ethylene Oxide	0	0	0
Average							0.01782
GP Out 724.	5/30/19	14:09:25	Methane	Ethylene Oxide	0	0	0
GP Out 725.	5/30/19	14:12:25	Methane	Ethylene Oxide	0	0	0
GP Out 726.	5/30/19	14:15:25	Methane	Ethylene Oxide	0	0	0
GP Out 727.	5/30/19	14:18:25	Methane	Ethylene Oxide	0	0	0
GP Out 728.	5/30/19	14:21:25	Methane	Ethylene Oxide	0	0	0
GP Out 729.	5/30/19	14:24:25	Methane	Ethylene Oxide	2.163	2.6839	0.17632
GP Out 730.	5/30/19	14:27:25	Methane	Ethylene Oxide	0	0	0
GP Out 731.	5/30/19	14:30:25	Methane	Ethylene Oxide	0	0	0
GP Out 732.	5/30/19	14:33:25	Methane	Ethylene Oxide	0	0	0
GP Out 733.	5/30/19	14:36:25	Methane	Ethylene Oxide	2.126	1.8422	0.12102
GP Out 734.	5/30/19	14:39:25	Methane	Ethylene Oxide	0	0	0
GP Out 735.	5/30/19	14:42:26	Methane	Ethylene Oxide	2.15	144.7618	9.5101
GP Out 736.	5/30/19	14:45:26	Methane	Ethylene Oxide	0	0	0
GP Out 737.	5/30/19	14:48:26	Methane	Ethylene Oxide	2.113	4.3269	0.28425
GP Out 738.	5/30/19	14:51:26	Methane	Ethylene Oxide	0	0	0
GP Out 739.	5/30/19	14:54:26	Methane	Ethylene Oxide	0	0	0
GP Out 740.	5/30/19	14:57:26	Methane	Ethylene Oxide	0	0	0
GP Out 741.	5/30/19	15:00:26	Methane	Ethylene Oxide	2.18	1.6947	0.11133
GP Out 742.	5/30/19	15:03:26	Methane	Ethylene Oxide	2.04	3.8792	0.25484
GP Out 743.	5/30/19	15:06:26	Methane	Ethylene Oxide	0	0	0
GP Out 744.	5/30/19	15:09:26	Methane	Ethylene Oxide	0	0	0
GP Out 745.	5/30/19	15:12:26	Methane	Ethylene Oxide	0	1.0915	0.07171
GP Out 746.	5/30/19	15:15:26	Methane	Ethylene Oxide	0	0	0
GP Out 747.	5/30/19	15:18:26	Methane	Ethylene Oxide	2.046	4.8264	0.31707
GP Out 748.	5/30/19	15:21:26	Methane	Ethylene Oxide	0	0	0
GP Out 749.	5/30/19	15:24:26	Methane	Ethylene Oxide	0	0	0
GP Out 750.	5/30/19	15:27:26	Methane	Ethylene Oxide	2.183	2.1664	0.14232
GP Out 751.	5/30/19	15:30:26	Methane	Ethylene Oxide	2.113	1.3156	0.08643
GP Out 752.	5/30/19	15:33:26	Methane	Ethylene Oxide	0	0	0
GP Out 753.	5/30/19	15:36:26	Methane	Ethylene Oxide	2.043	3.635	0.2388
GP Out 754.	5/30/19	15:39:26	Methane	Ethylene Oxide	0	0	0
GP Out 755.	5/30/19	15:42:26	Methane	Ethylene Oxide	2.14	2.8094	0.18456
GP Out 756.	5/30/19	15:45:26	Methane	Ethylene Oxide	0	0	0

Outlet

GP_Out_757.	5/30/19	15:48:27	Methane	Ethylene Oxide	0	0	0
GP_Out_758.	5/30/19	15:51:27	Methane	Ethylene Oxide	0	0	0
GP_Out_759.	5/30/19	15:54:27	Methane	Ethylene Oxide	0	0	0
Average							0.07035
GP_Out_760.	5/30/19	15:57:27	Methane	Ethylene Oxide	0	0	0
GP_Out_761.	5/30/19	16:00:27	Methane	Ethylene Oxide	2.163	164.918	10.8343
GP_Out_762.	5/30/19	16:03:27	Methane	Ethylene Oxide	2.143	148.1963	9.73573
GP_Out_764.	5/30/19	16:06:27	Methane	Ethylene Oxide	2.15	148.189	9.73525
GP_Out_761.	5/30/19	16:09:27	Methane	Ethylene Oxide	2.153	145.132	9.53442

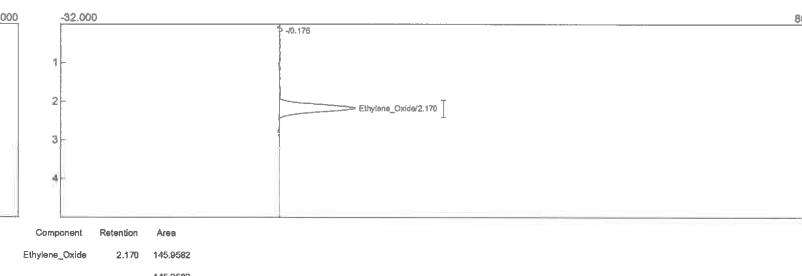
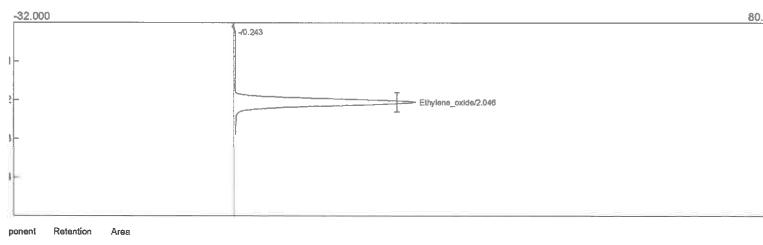
sis date: 05/30/2016 06:54:18
cription: Channel 3-In
Data file: GP_in_579.CHR()
Sample: 100 ppm Initial Mid Cal

Analysis date: 05/30/2016 06:54:18
Description: Channel 2-Out
Data file: GP_Out_579.chr()
Sample: 10 ppm Initial Mid Cal



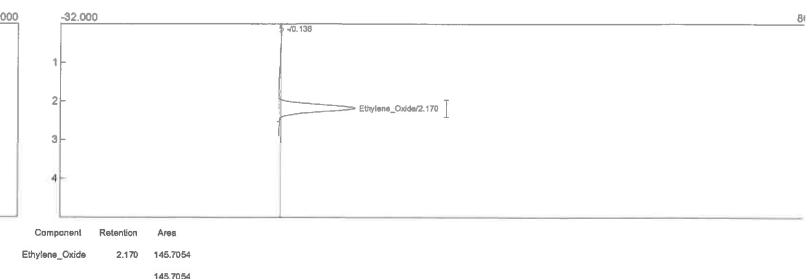
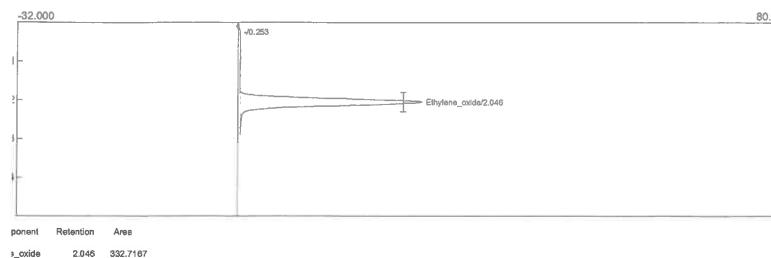
sis date: 05/30/2019 06:57:18
cription: Channel 3-IN
Data file: GP_in_580.CHR()
Sample: 100 ppm Initial Mid Cal

Analysis date: 05/30/2019 06:57:18
Description: Channel 2-Out
Data file: GP_out_580.chr()
Sample: 10 ppm Initial Mid Cal



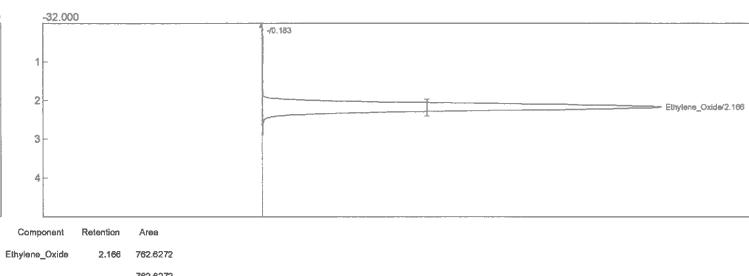
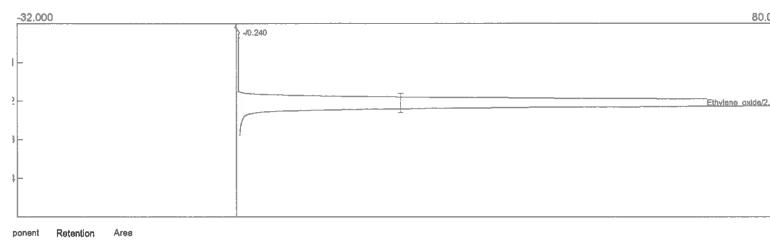
File date: 05/30/2019 07:00:18
Description: Channel 3-IN
Data file: GP_In_581.CHR()
Sample: 100 ppm Initial Mid Cal

Analysis date: 05/30/2019 07:00:18
Description: Channel 2-Out
Data file: GP_out_581.chr()
Sample: 10 ppm Initial Mid Cal



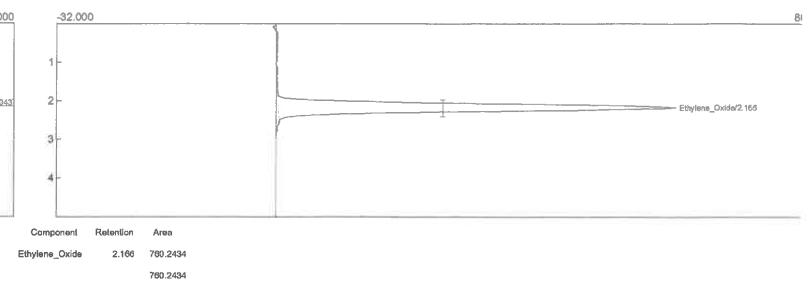
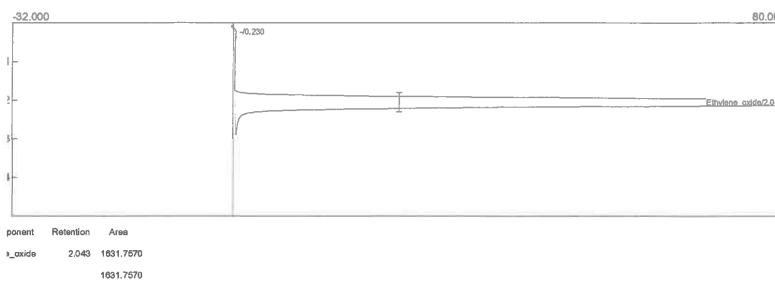
sis date: 05/30/2019 07:12:18
cription: Channel 3-IN
Data file: GP_In_585.CHR()
Sample: 500 ppm Initial HI Cal

Analysis date: 05/30/2019 07:12:18
Description: Channel 2-Out
Data file: GP_Out_585.chr()
Sample: 50 ppm initial HI Cal

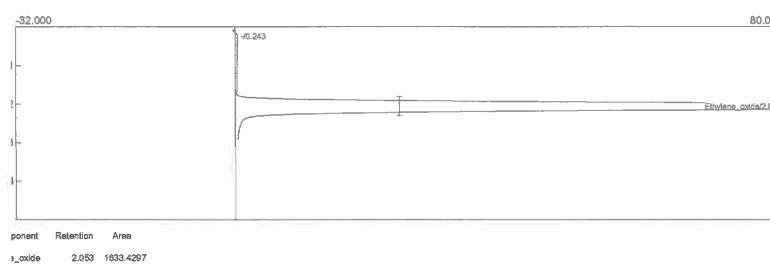


sis date: 05/30/2019 07:15:18
cription: Channel 3-N
Data file: GP_In_586.CHR ()
Sample: 500 ppm Initial Hi Cal

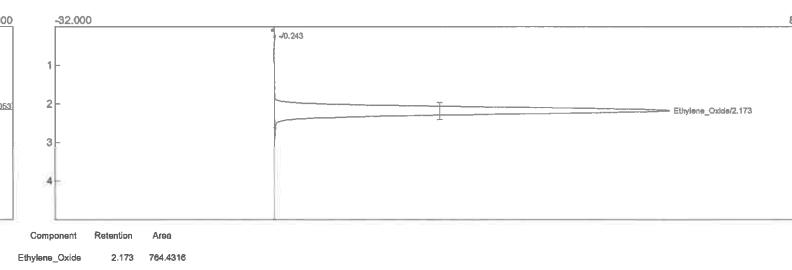
Analysis date: 05/30/2019 07:15:18
Description: Channel 2-Cut
Data file: GP_out_586.chr ()
Sample: 50 ppm Initial Hi Cal



Analysis date: 05/30/2019 07:18:18
Description: Channel 3-IN
Data file: GP_out_587.CHR ()
Sample: 50 ppm Initial Hi Cal

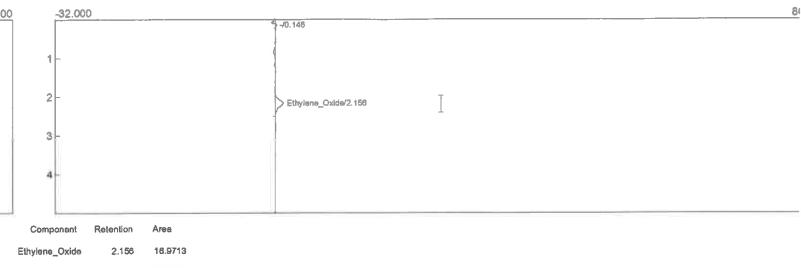
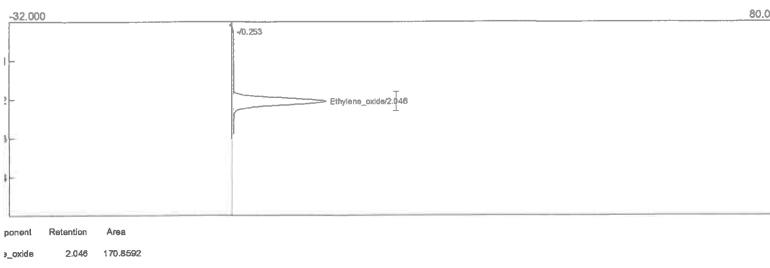


Analysis date: 05/30/2019 07:18:18
Description: Channel 2-Out
Data file: GP_in_587.chr ()
Sample: 50 ppm Initial Hi Cal

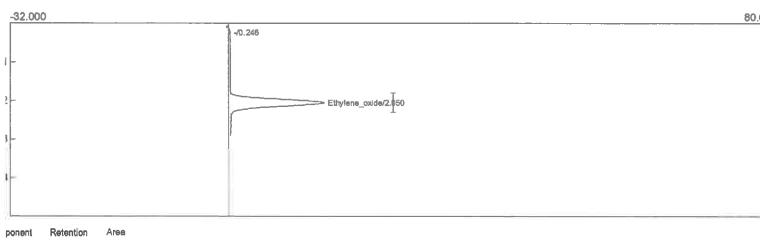


sis date: 05/30/2010 07:39:18
cription: Channel 3-IN
Data file: GP_in_594.CHR()
Sample: 50 ppm Initial Low Cal

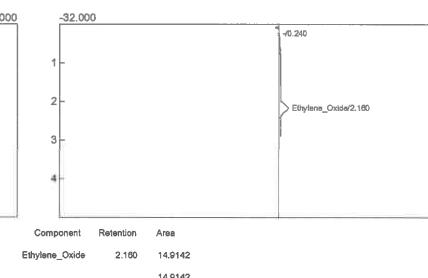
Analysis date: 05/30/2010 07:39:18
Description: Channel 2-Out
Data file: GP_out_594.CHR()
Sample: 1 ppm Initial Low Cal



Analysis date: 05/30/2019 07:42:18
Description: Channel 3-IN
Data file: GP_in_595.CHR()
Sample: 50 ppm Initial Low Cal

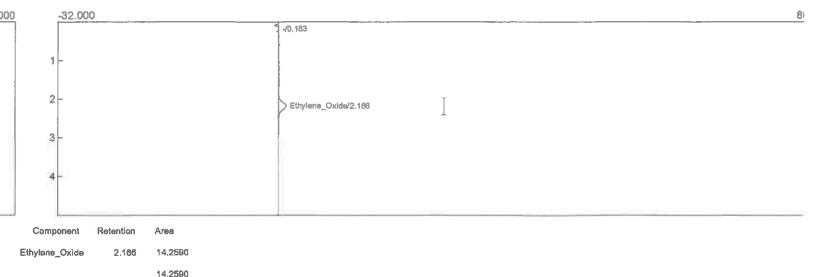
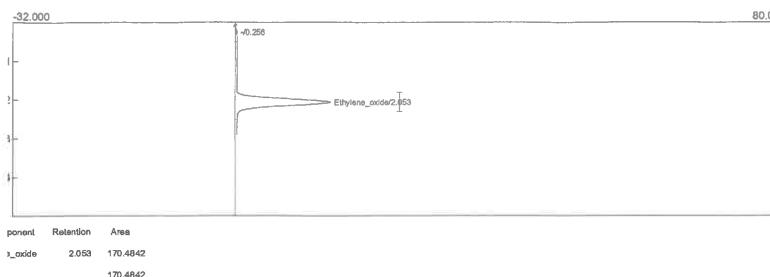


Analysis date: 05/30/2019 07:42:18
Description: Channel 2-Out
Data file: GP_out_595.CHR()
Sample: 1 ppm Initial Low Cal



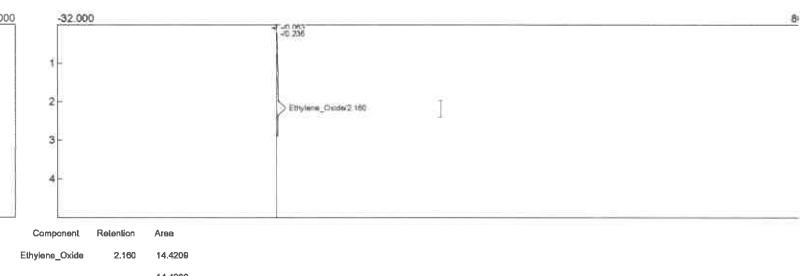
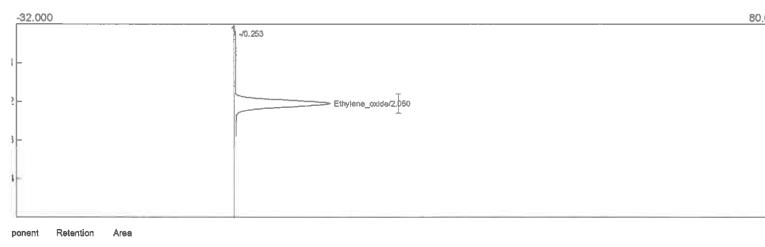
Analysis date: 05/30/2010 07:45:18
Description: Channel 3-In
Data file: GP_In_596.CHR ()
Sample: 50 ppm Initial Low Cal

Analysis date: 05/30/2010 07:45:18
Description: Channel 2-Out
Data file: GP_Out_596.CHR ()
Sample: 1 ppm Initial Low Cal



sis date: 05/30/2019 07:48:18
cription: Channel 3-IN
Data file: GP_in_597.CHR()
Sample: 50 ppm Initial LowCal

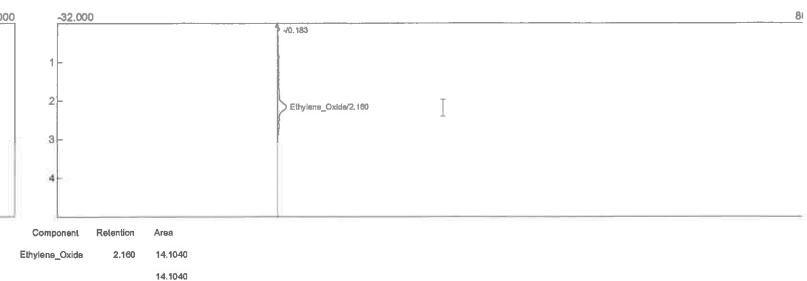
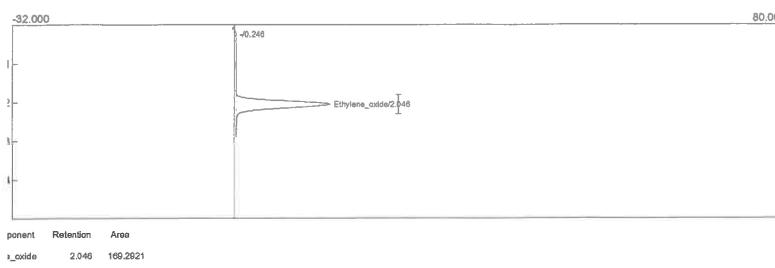
Analysis date: 05/30/2019 07:48:18
Description: Channel 2-Out
Data file: GP_out_597.CHR()
Sample: 1 ppm Initial LowCal



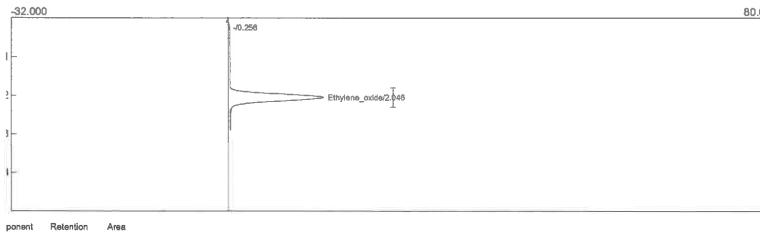
els date: 05/30/2010 07:51:19
cription: Channel 2-IN
Date file: GP_in_598.CHR ()
Sample: 50 ppm Initial Low Cal

Analysis date: 05/30/2010 07:51:19
Description: Channel 2-Out
Data file: GP_out_598.chr ()
Sample: 1 ppm Initial Low Cal

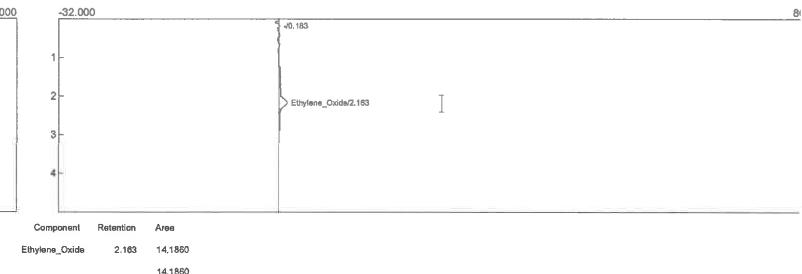
81



Analysis date: 05/30/2019 07:54:19
Description: Channel 3-IN
Data file: GP_in_599.CHR()
Sample: 50 ppm Initial Low Cal

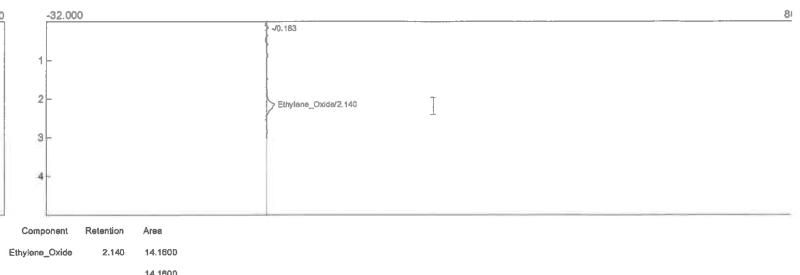
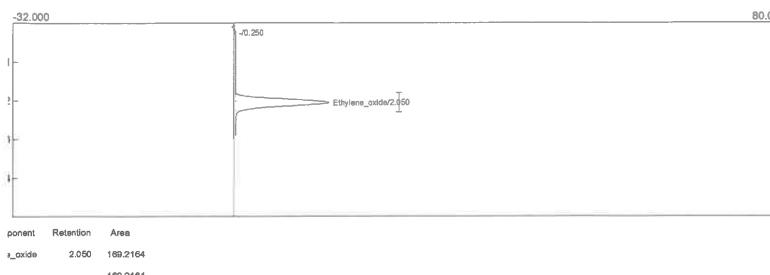


Analysis date: 05/30/2019 07:54:19
Description: Channel 2-Out
Data file: GP_out_599.CHR()
Sample: 1 ppm Initial Low Cal

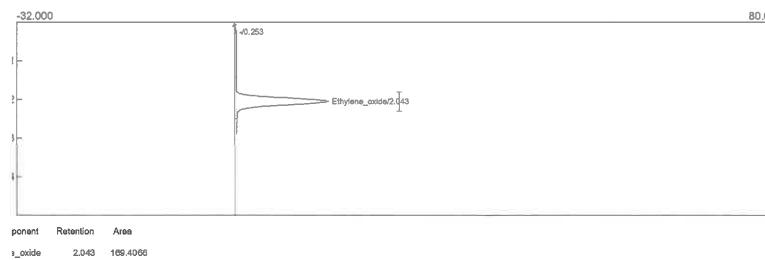


sis date: 05/30/2010 07:57:19
cription: Channel 3-N
Data file: GP_In_600.CHR ()
Sample: 50 ppm Initial Low Cal

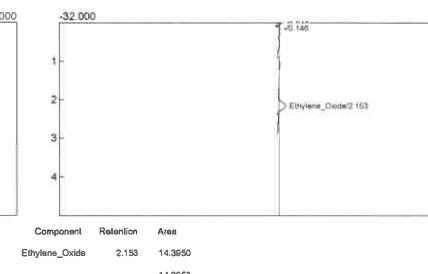
Analysis date: 05/30/2010 07:57:19
Description: Channel 2-Out
Data file: GP_Out_599.chr ()
Sample: 1 ppm Initial Low Cal



Analysis date: 05/30/2019 08:00:19
Description: Channel 3-In
Data file: GP_in_601.CHR ()
Sample: 50 ppm Initial Low Cal

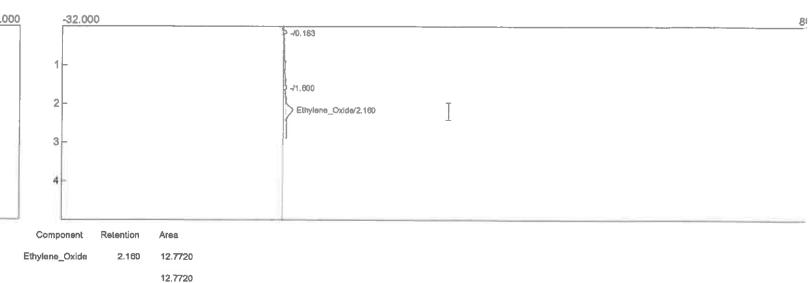
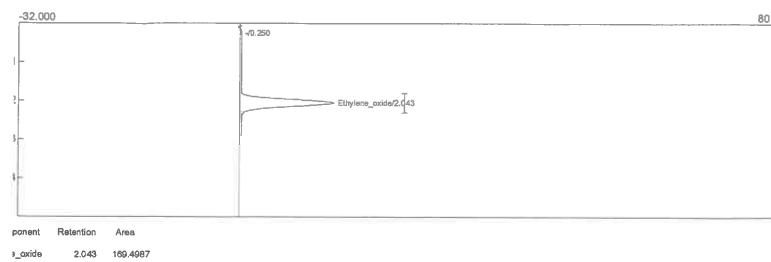


Analysis date: 05/30/2019 08:00:19
Description: Channel 2-Out
Data file: GP_out_601.CHR ()
Sample: 1 ppm Initial Low Cal



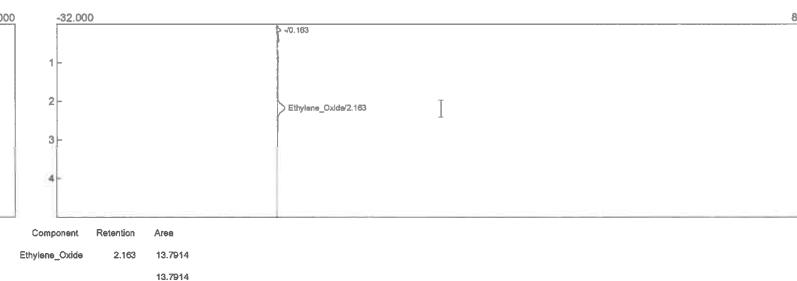
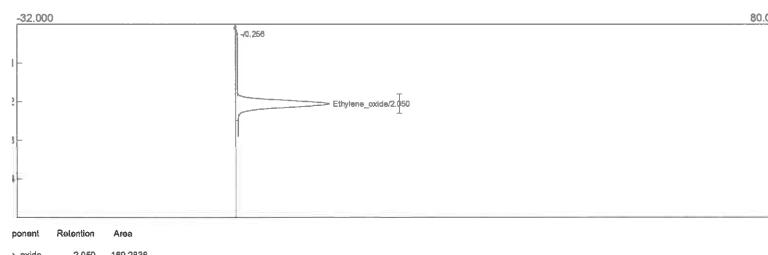
Analysis date: 05/30/2019 08:03:19
Script: Channel 3-IN
Data file: GP_In_602.CHR()
Sample: 50 ppm Initial Low Cal

Analysis date: 05/30/2019 08:03:19
Description: Channel 2-Out
Data file: GP_Out_602.chr()
Sample: 1 ppm Initial Low Cal



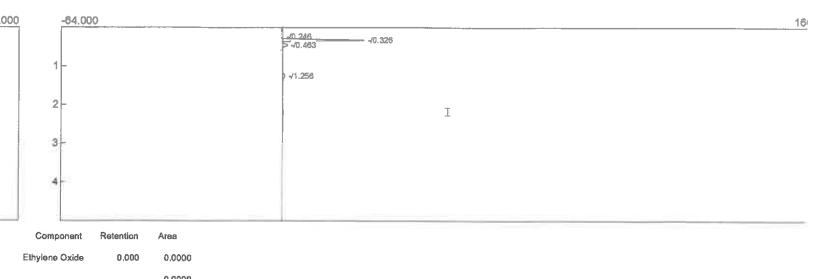
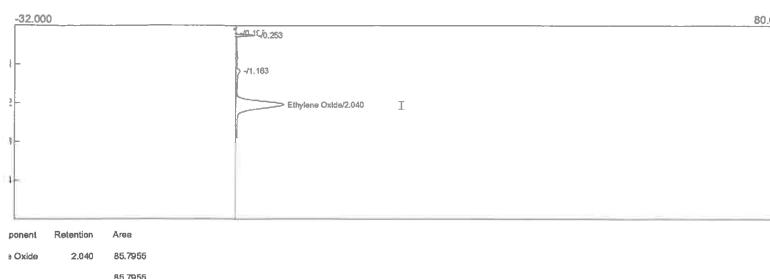
sis date: 05/30/2019 08:06:19
cription: Channel 3-IN
Data file: GP_in_603.CHR()
Sample: 50 ppm Initial Low Cal

Analysis date: 05/30/2019 08:06:19
Description: Channel 2-Out
Data file: GP_out_603.chr()
Sample: 1 ppm Initial Low Cal



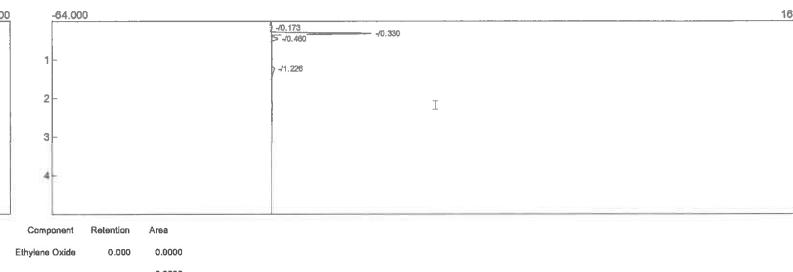
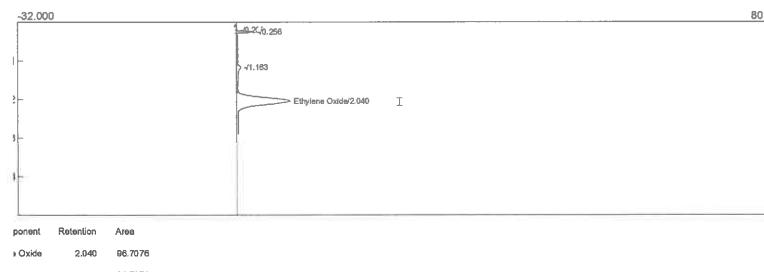
Analysis date: 05/30/2016 09:15:21
Scriptfile: Channel 3-IN
Data file: GP_in_626.CHR ()
Sample: BV_Run_1_Inj.i

Analysis date: 05/30/2016 09:15:21
Description: Channel 2-Out
Data file: GP_out_626.chr ()
Sample: BV_Run_1_Inj.i



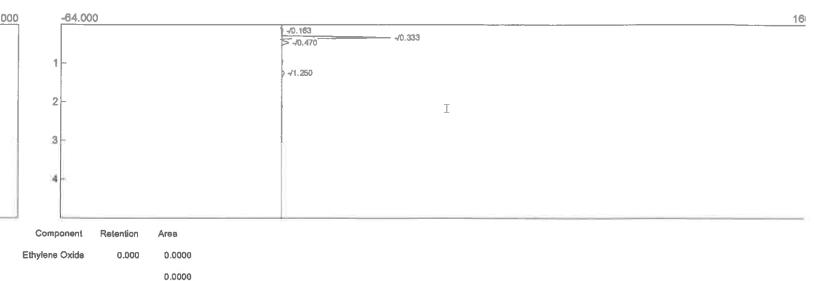
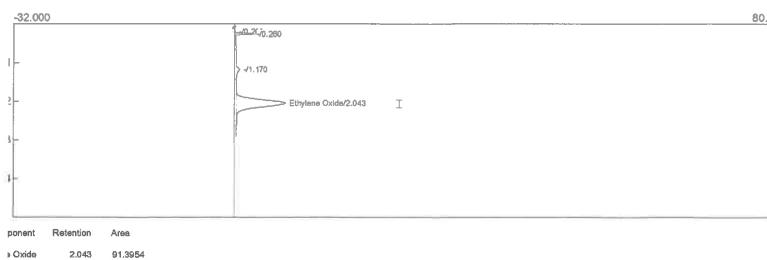
Analysis date: 05/30/2019 09:18:21
Description: Channel 3-IN
Data file: GP_in_627.CHR()
Sample: BV_Run_1_Inj.2

Analysis date: 05/30/2019 09:18:21
Description: Channel 2-Out
Data file: GP_out_627.chr()
Sample: BV_Run_1_Inj.2



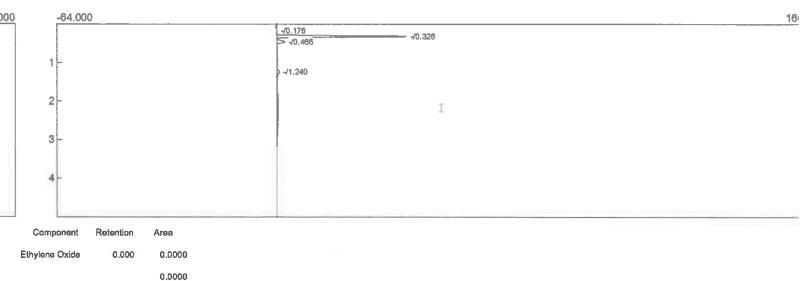
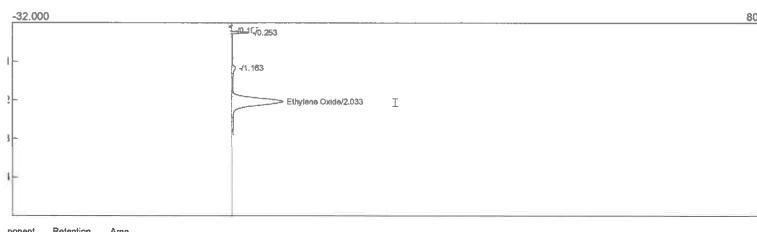
Analysis date: 05/30/2019 09:21:21
Description: Channel 3-IN
Data file: GP_in_628.CHR()
Sample: BV_Run_1_Inj.3

Analysis date: 05/30/2019 09:21:21
Description: Channel 2-Out
Data file: GP_out_528.chr()
Sample: BV_Run_1_Inj.3



sis date: 05/30/2019 09:24:21
cription: Channel 3-IN
Data file: GP_in_629.CHR()
Sample: BV_Run_1_Inj.4

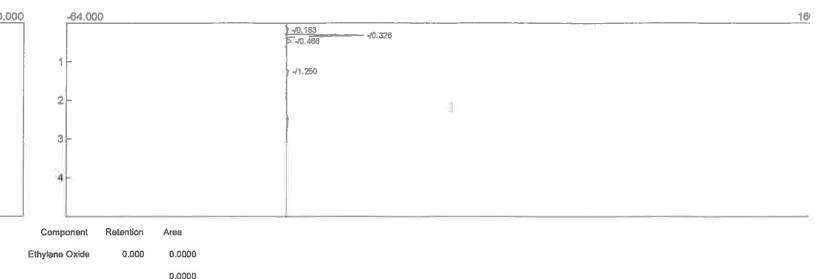
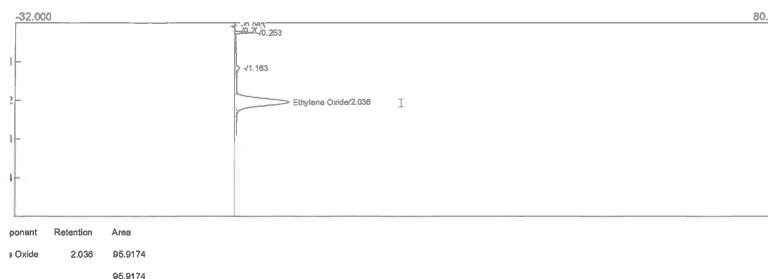
Analysis date: 05/30/2019 09:24:21
Description: Channel 2-Out
Data file: GP_out_629.chr()
Sample: BV_Run_1_Inj.4



als date: 05/30/2019 09:27:21
cription: Channel 3-IN
Data file: GP_In_830.CHR()
Sample: BV_Run_1_Inj_5

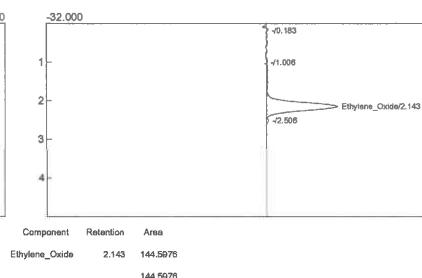
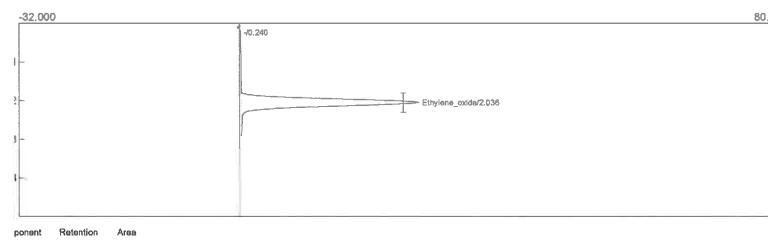
Analysis date: 05/30/2019 09:27:21
Description: Channel 2-Out
Data file: GP_Out_830.chr()
Sample: BV_Run_1_Inj_5

16



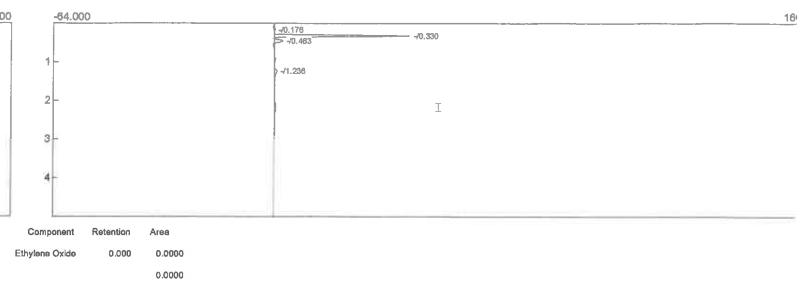
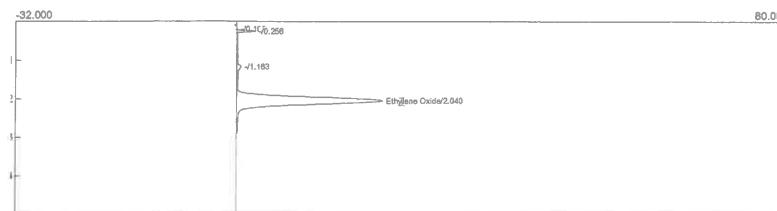
sis date: 05/30/2019 9:36:22
cription: Channel 3-IN
Data file: GP_in_633.CHR()
Sample: Post BV 1 Mid Cal

Analysis date: 05/30/2019 9:36:22
Description: Channel 2-Out
Data file: GP_out_633.ohr()
Sample: Post BV 1 Mid Cal



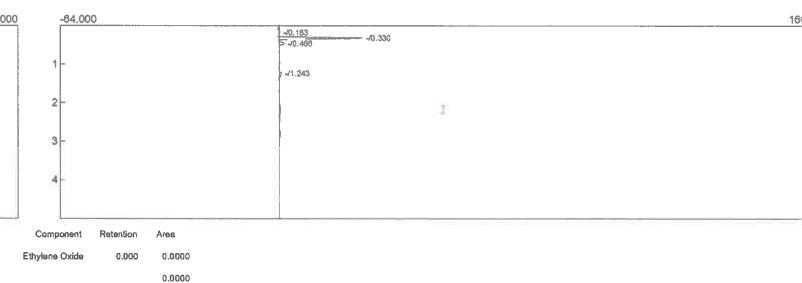
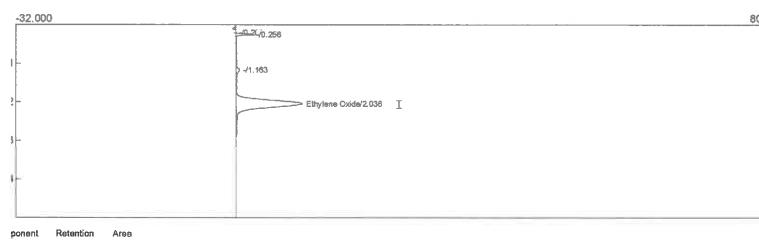
Analysis date: 05/30/2019 09:54:22
Description: Channel 3-IN
Data file: GP_In_639.CHR()
Sample: BV_Run_2_Inj.1

Analysis date: 05/30/2019 09:54:22
Description: Channel 2-Out
Data file: GP_Out_639.CHR()
Sample: BV_Run_2_Inj.1



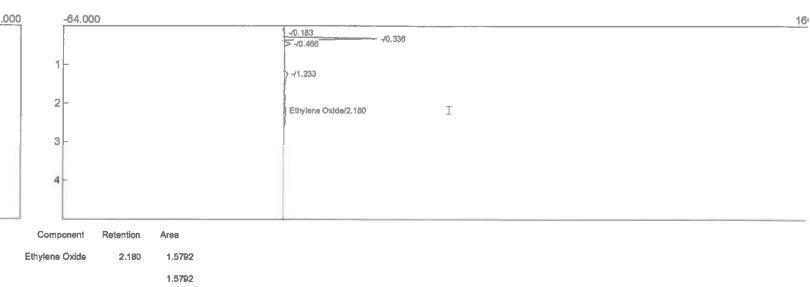
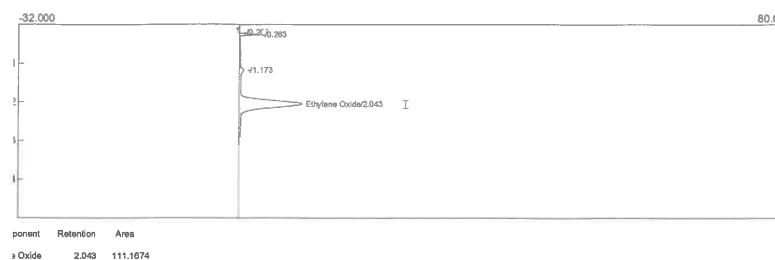
sis date: 05/30/2019 09:57:22
cription: Channel 3-IN
Data file: GP_in_840.CHR()
Sample: BV_Run_2_Inj.2

Analysis date: 05/30/2019 09:57:22
Description: Channel 2-Out
Data file: GP_out_840.CHR()
Sample: BV_Run_2_Inj.2



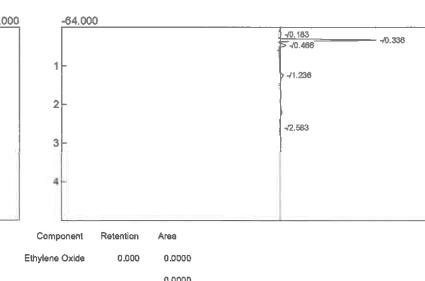
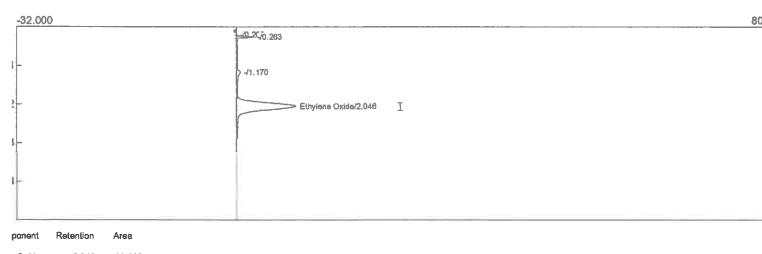
sis date: 05/30/2019 10:00:22
cription: Channel 3-IN
Data file: GP_in_641.CHR()
Sample: BV_Run_2_Inj.3

Analysis date: 05/30/2019 10:00:22
Description: Channel 2-Out
Data file: GP_out_841.chr()
Sample: BV_Run_2_Inj.3



Analysis date: 05/30/2019 10:03:22
Description: Channel 3-IN
Data file: GP_in_642.CHR ()
Sample: BV_R2_Inj.4

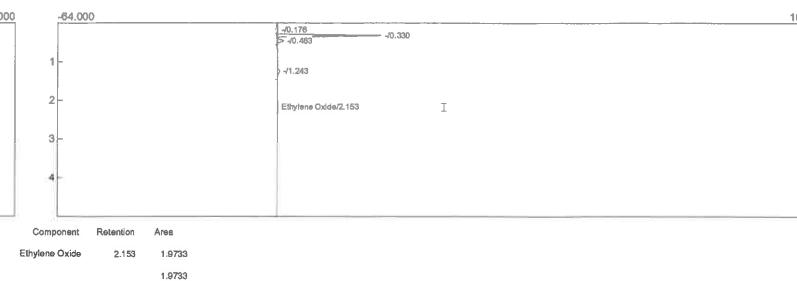
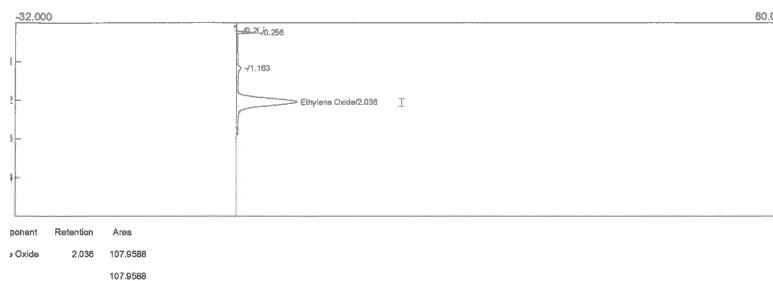
Analysis date: 05/30/2019 10:03:22
Description: Channel 2-Out
Data file: GP_out_642.CHR ()
Sample: BV_Run_2_hij.3



Analysis date: 05/30/2019 10:06:22
Description: Channel 3-IN
Data file: GP_in_643.CHR()
Sample: BV_Run_2_Inj.5

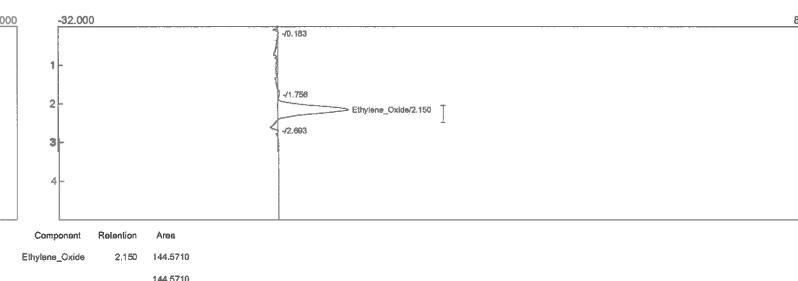
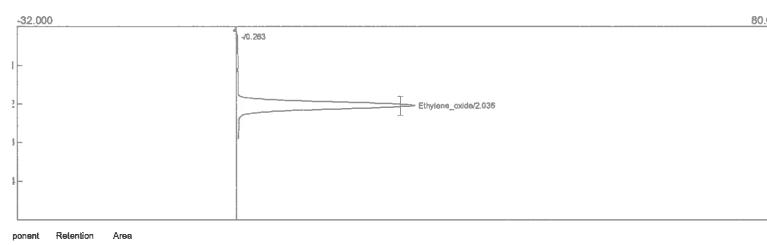
Analysis date: 05/30/2019 10:06:22
Description: Channel 2-Out
Data file: GP_out_643.CHR()
Sample: BV_Run_2_Inj.5

16



sis date: 05/30/2019 10:15:23
cription: Channel 3-IN
Data fil: GP_In_546.CHR ()
Sample: Post BV 2 Mid Cal

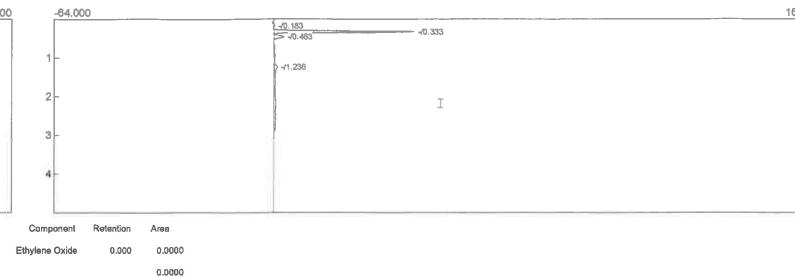
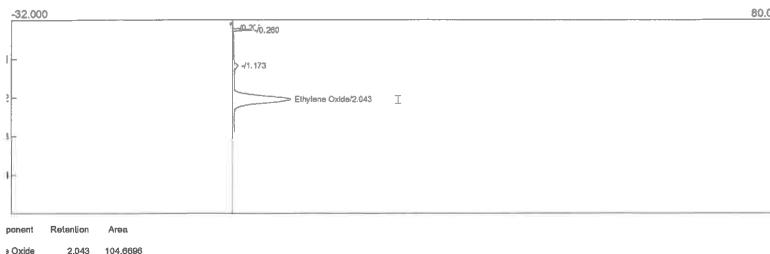
Analysis date: 05/30/2019 10:15:23
Description: Channel 2-Out
Data filc: GP_out_546.chr ()
Sample: Post BV 2 Mid Cal



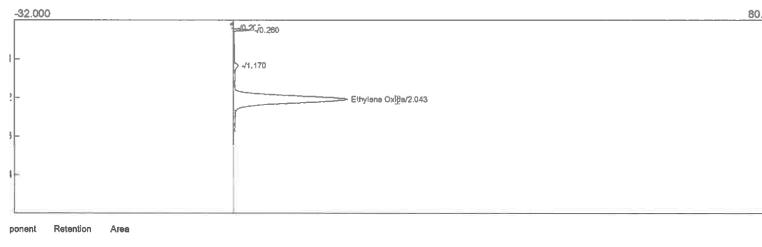
Analysis date: 05/30/2019 11:09:24
Description: Channel 3-IN
Data file: GP_in_664.CHR()
Sample: BV_Run_3_Inj.1

Analysis date: 05/30/2019 11:09:24
Description: Channel 2-Out
Data file: GP_out_664.CHR()
Sample: BV_Run_3_Inj.1

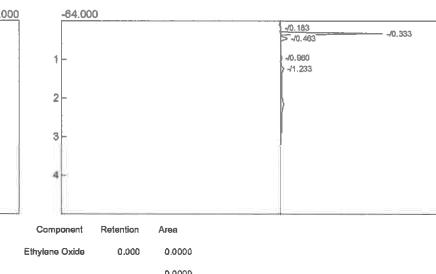
16



Analysis date: 05/30/2019 11:12:24
Description: Channel 3-IN
Data file: CP_in_865.CHR()
Sample: BV_Run_3_Inj.2

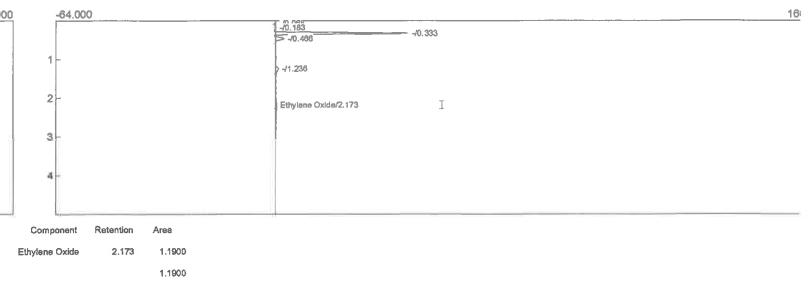
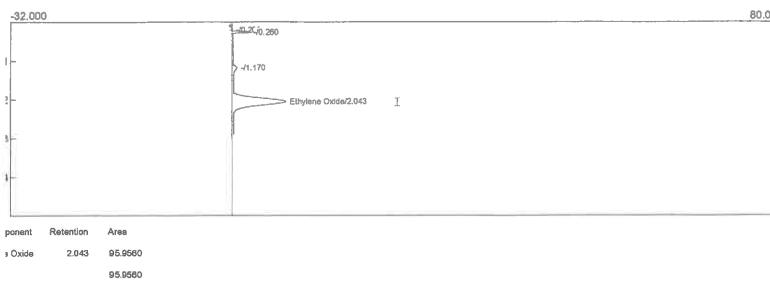


Analysis date: 05/30/2019 11:12:24
Description: Channel 2-Out
Data file: GP_out_865.chr()
Sample: BV_Run_3_Inj.2



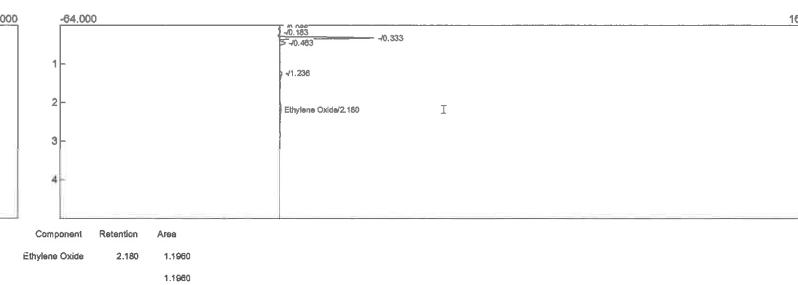
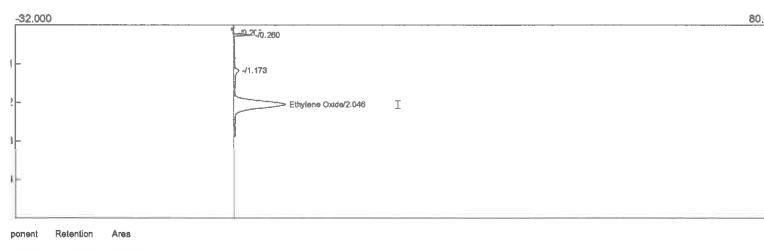
sis date: 05/30/2019 11:15:24
cription: Channel 3-IN
Data file: GP_In_666.CHR ()
Sample: BV_Run_3_Inj.3

Analysis date: 05/30/2019 11:15:24
Description: Channel 2-Out
Data file: GP_Out_666.CHR ()
Sample: BV_Run_3_Inj.3



sis date: 05/30/2019 11:18:24
cription: Channel 3-IN
Data file: GP_in_667.CHR ()
Sample: BV_Run_3_Inj.4

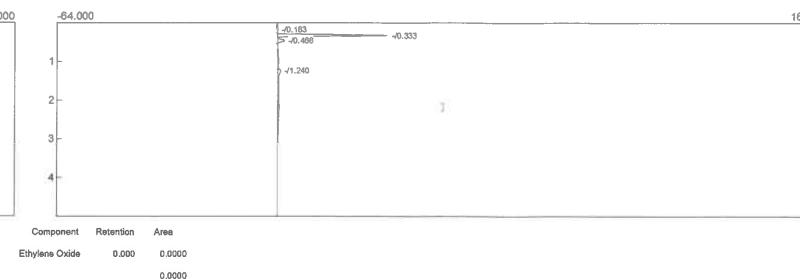
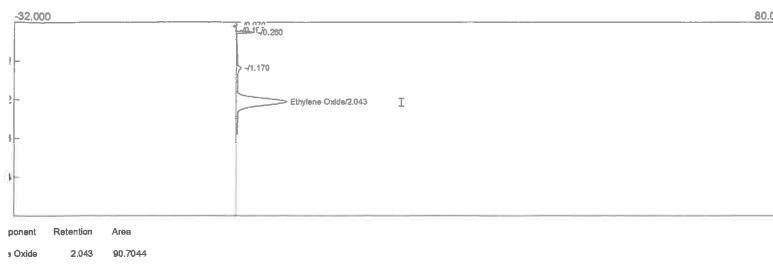
Analysis date: 05/30/2019 11:18:24
Description: Channel 2-Out
Data file: GP_out_667.CHR ()
Sample: BV_Run_3_Inj.4



Analysis date: 05/30/2019 11:21:24
Description: Channel 3-IN
Data file: GP_In_668.CHR()
Sample: BV_Run_3_Inj.5

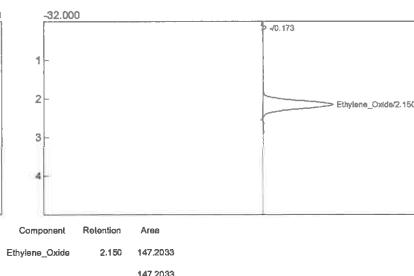
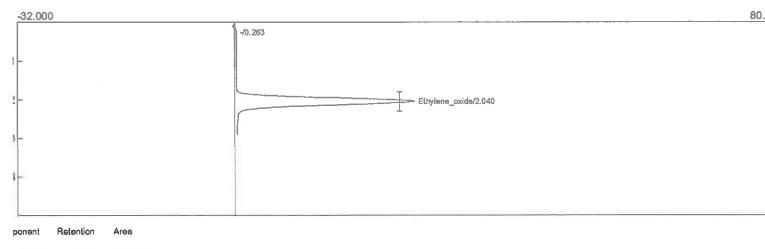
Analysis date: 05/30/2019 11:21:24
Description: Channel 2-Out
Data file: GP_Out_668.chr()
Sample: BV_Run_3_Inj.5

16



sis date: 05/30/2019 11:30:24
cription: Channel 3-IN
Data file: GP_in_671.CHR()
Sample: Post BV 3 Mid Cal

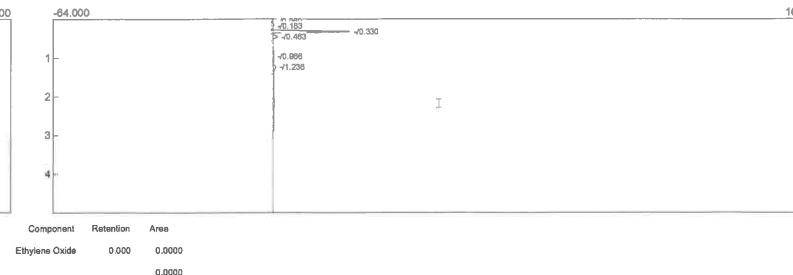
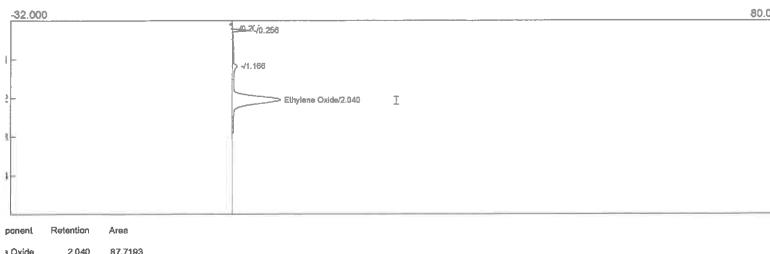
Analysis date: 05/30/2019 11:30:24
Description: Channel 2-Out
Data file: GP_out_671.chr()
Sample: Post BV 3 Mid Cal



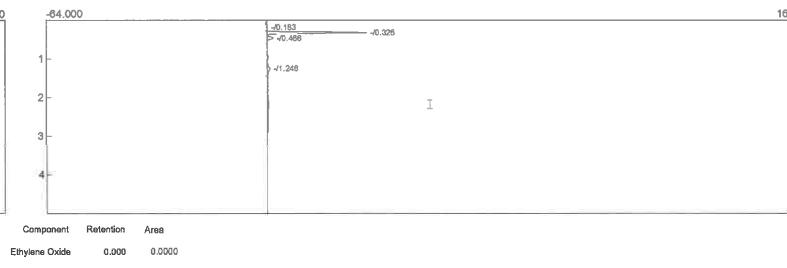
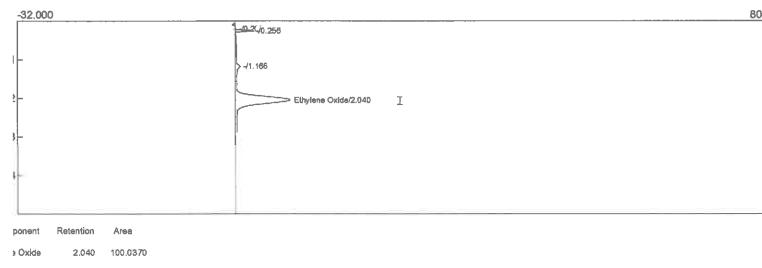
sis date: 05/30/2019 12:00:24
Description: Channel 5-In
Data file: GP_in_681.CHR ()
Sample: Run_1_Inj.1

Analysis date: 05/30/2019 12:00:24
Description: Channel 2-Out
Data file: GP_out_681.chr ()
Sample: Run_1_Inj.1

16

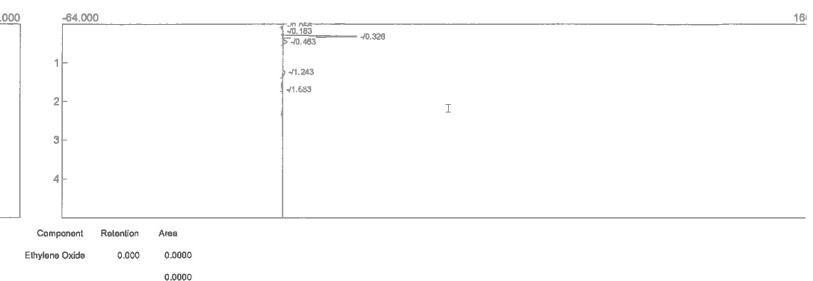
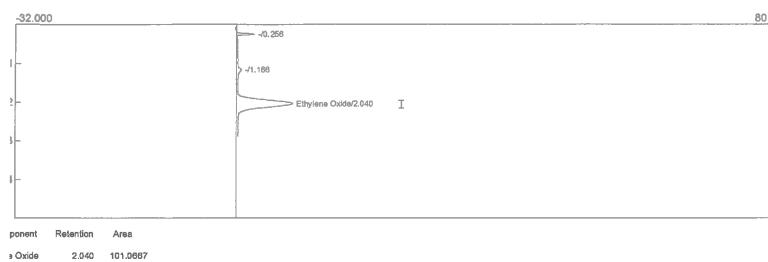


sis date: 05/30/2019 12:03:24
cription: Channel 3-IN
Data file: GP_in_682.CHR()
Sample: Run_1_Inj.2



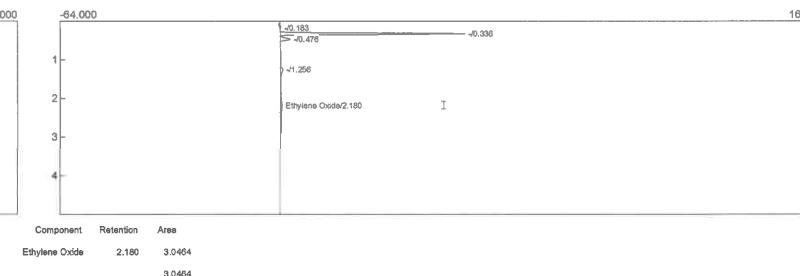
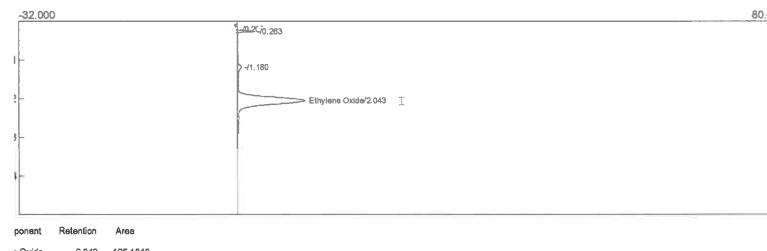
sis date: 05/30/2019 12:06:24
scription: Channel 3-IN
Data file: GP_in_683.CHR()
Sample: Run_1_Inj.3

Analysis date: 05/30/2019 12:06:24
Description: Channel 2-Out
Data file: GP_out_683.chr()
Sample: Run_1_Inj.3



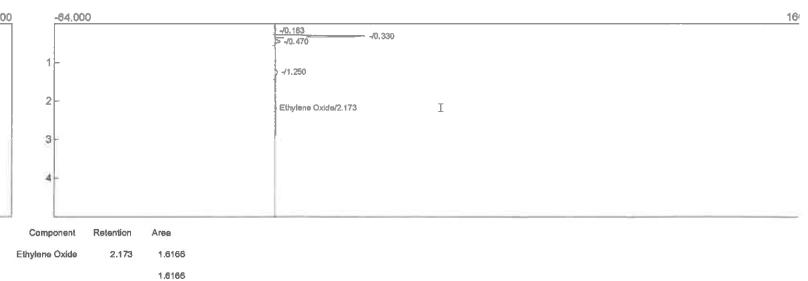
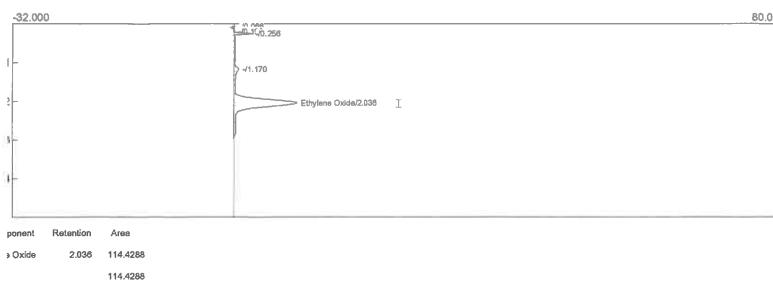
sis date: 05/30/2019 12:09:24
scription: Channel 3-IN
Data file: GP_in_684.CHR ()
Sample: Run_1_Inj.4

Analysis date: 05/30/2019 12:08
Description: Channel 2-Out
Data file: GP_out_684.chr
Sample: Run_1_Inj.4



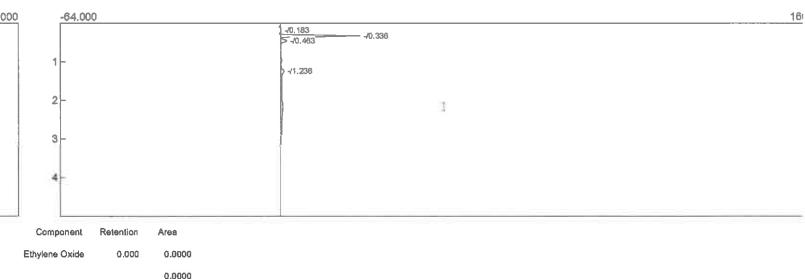
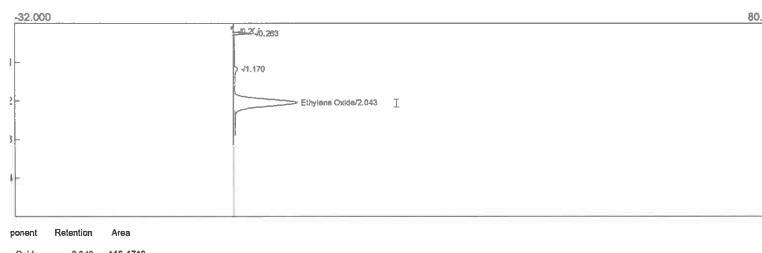
sis date: 05/30/2019 12:12:24
cription: Channel 3-IN
Data file: GP_In_885.CHR()
Sample: Run_1_Inj.5

Analysis date: 05/30/2019 12:12:24
Description: Channel 2-Out
Data file: GP_Out_885.chr()
Sample: Run_1_Inj.5



sis date: 05/30/2019 12:15:24
cription: Channel 3-IN
Data file: GP_in_886.CHR()
Sample: Run_1_Inj.6

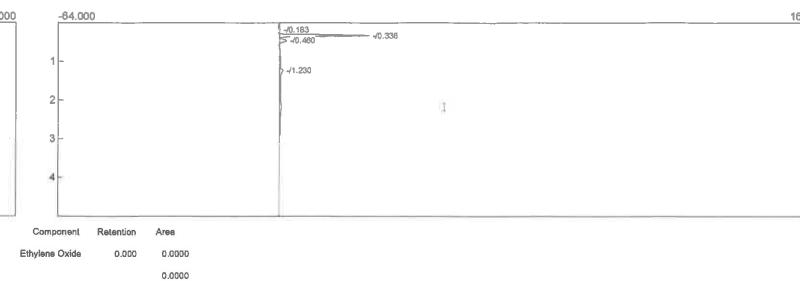
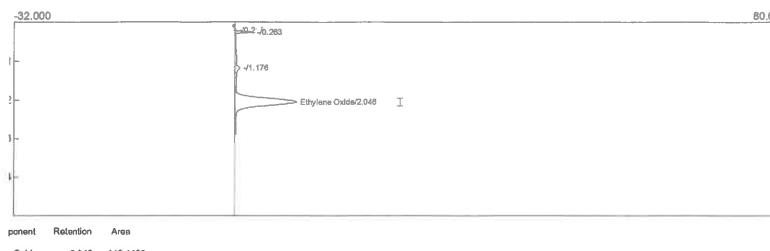
Analysis date: 05/30/2019 12:15:24
Description: Channel 2-Out
Data file: GP_out_886.chr()
Sample: Run_1_Inj.6



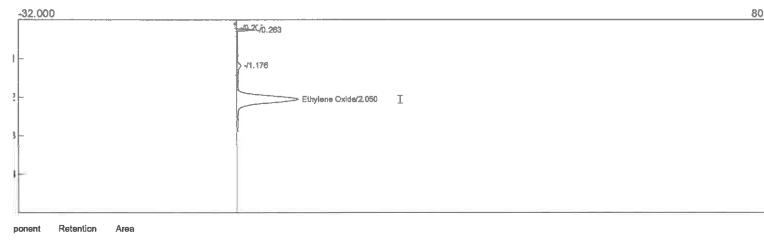
Analysis date: 05/30/2019 12:18:24
Description: Channel 3-IN
Data file: GP_In_687.CHR()
Sample: Run_1_Inj.7

Analysis date: 05/30/2019 12:18:24
Description: Channel 2-Out
Data file: GP_Out_687.chr()
Sample: Run_1_Inj.7

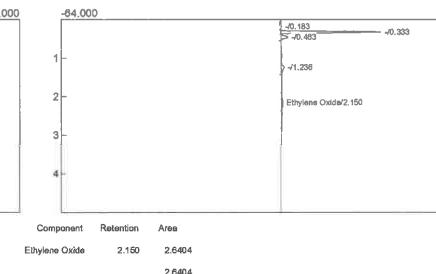
16



Analysis date: 05/30/2019 12:21:24
Description: Channel 3-IN
Data file: GP_in_688.CHR()
Sample: Run_1_Inj.8

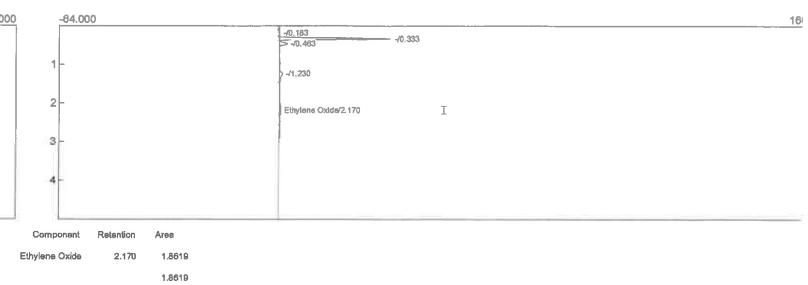
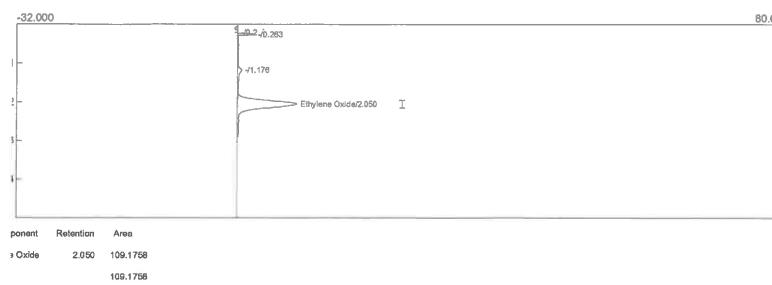


Analysis date: 05/30/2019 12:21:24
Description: Channel 2-Out
Data file: GP_out_688.CHR()
Sample: Run_1_Inj.8



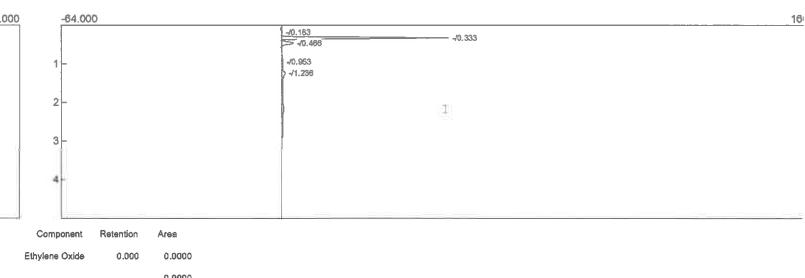
sis date: 05/30/2019 12:24:24
cription: Channel 3-IN
Data file: GP_In_689.CHR ()
Sample: Run_1_Inj.9

Analysis date: 05/30/2019 12:24:24
Description: Channel 2-Out
Data file: GP_out_689.chr ()
Sample: Run_1_Inj.9



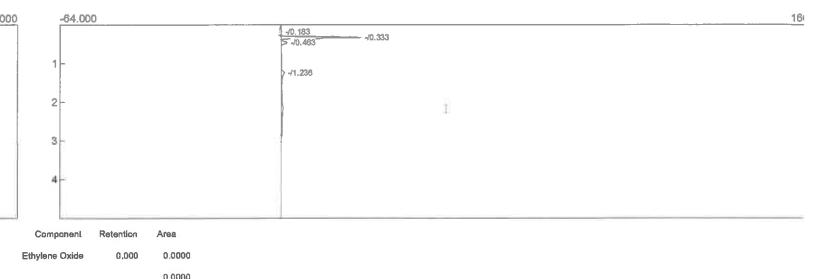
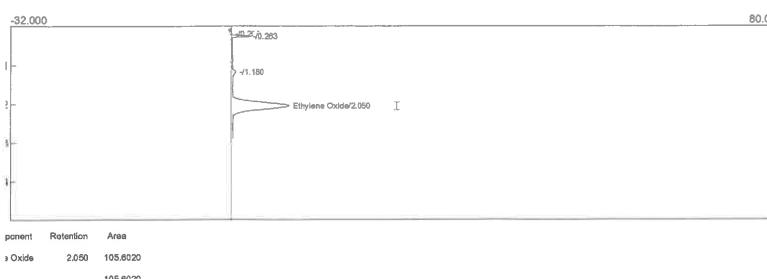
sis date: 05/30/2019 12:27:24
cription: Channel 3-IN
Data file: GP_in_990.CHR ()
Sample: Run_1_Inj.10

Analysis date: 05/30/2019 12:27:24
Description: Channel 2-Out
Data file: GP_out_990.chr ()
Sample: Run_1_Inj.10



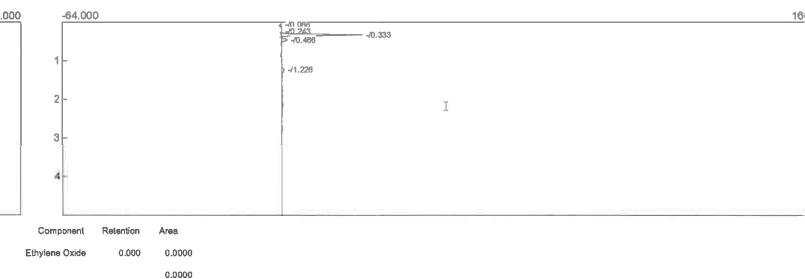
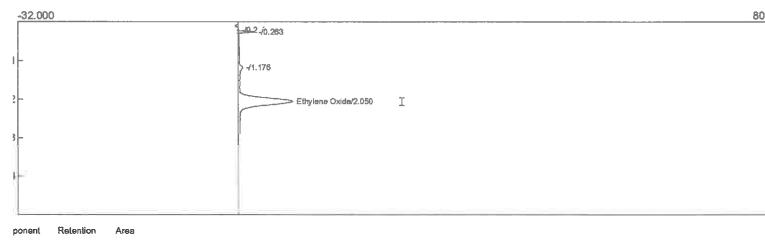
sis date: 05/30/2019 12:30:24
cription: Channel 3-IN
Data file: GP_in_691.CHR ()
Sample: Run_1_Inj.11

Analysis date: 05/30/2019 12:30:24
Description: Channel 2-Out
Data file: GP_out_691.chr ()
Sample: Run_1_Inj.11



sis date: 05/30/2019 12:33:24
cription: Channel 3-IN
Data fil: GP_in_692.CHR ()
Sample: Run_1_Inj.12

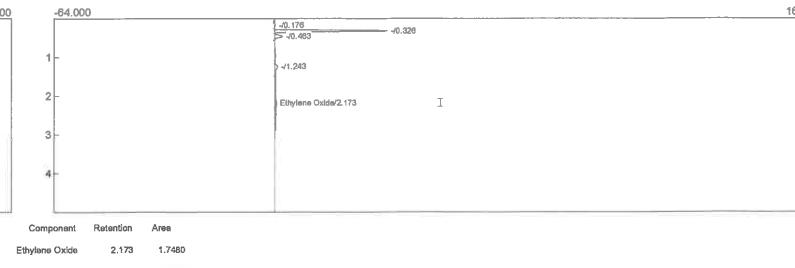
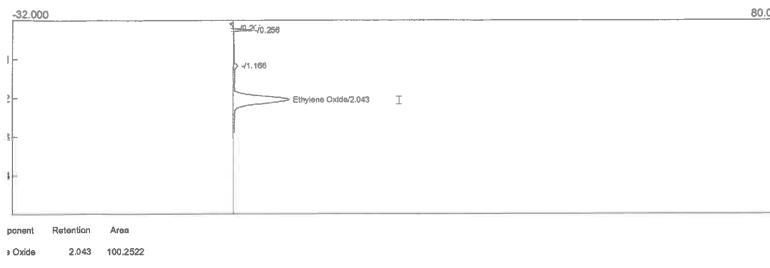
Analysis date: 05/30/2019 12:33:24
Description: Channel 2-Out
Data fil: GP_out_692.chr ()
Sample: Run_1_Inj.12



Analysis date: 05/30/2019 12:39:24
Description: Channel 5:N
Data file: GP_In_694.CHR()
Sample: Run_1_In[13]

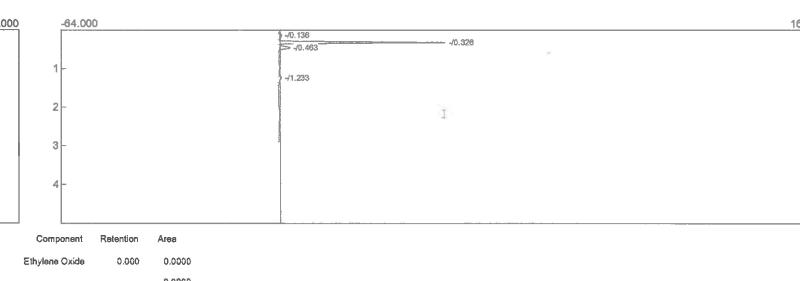
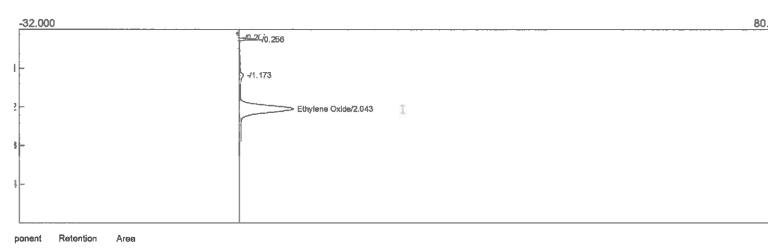
Analysis date: 05/30/2019 12:39:24
Description: Channel 2:Out
Data file: GP_out_694.chr()
Sample: Run_1_In[13]

16



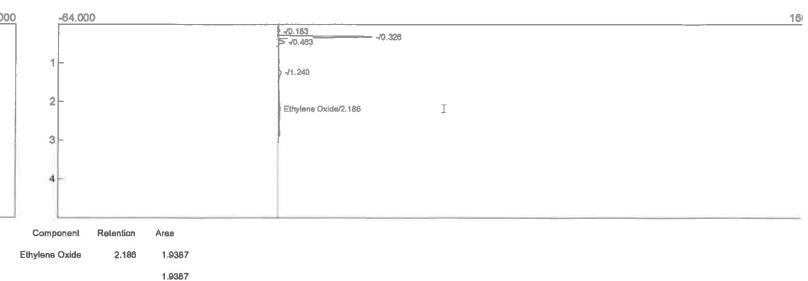
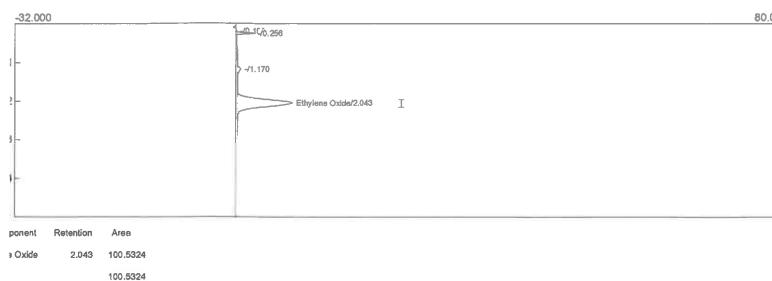
Analysis date: 05/30/2019 12:42:24
Script file: Channel 3-IN
Data file: GP_in_695.CHR()
Sample: Run_1_Inj.14

Analysis date: 05/30/2019 12:42:24
Description: Channel 2-Out
Data file: GP_out_695.chr()
Sample: Run_1_Inj.14



Analysis date: 05/30/2019 12:45:24
Script file: Channel 3.IN
Data file: GP_in_696.CHR()
Sample: Run_1_Inj.15

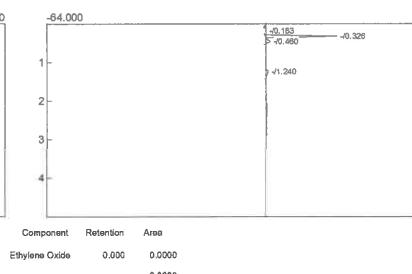
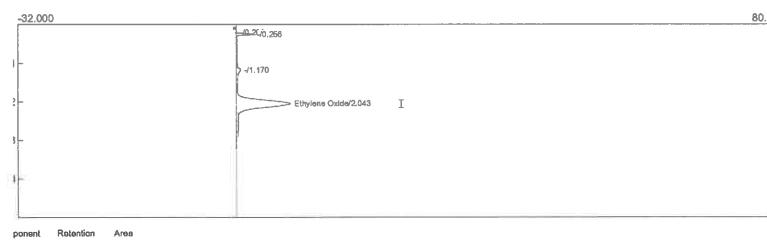
Analysis date: 05/30/2019 12:45:24
Description: Channel 2-Out
Data file: GP_out_696.chr()
Sample: Run_1_Inj.15



sis date: 05/30/2019 12:48:24
cription: Channel 3-IN
Data file: GP_in_697.CHR ()
Sample: Run_1_Inj.16

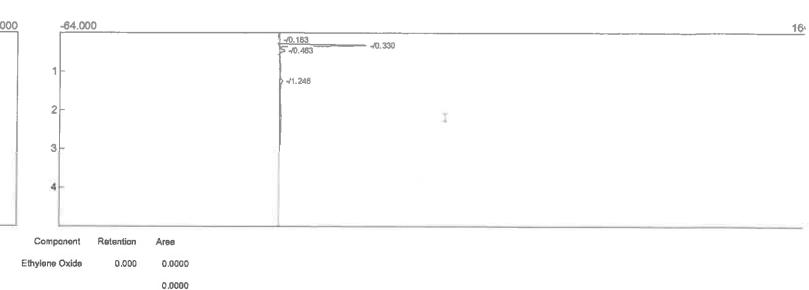
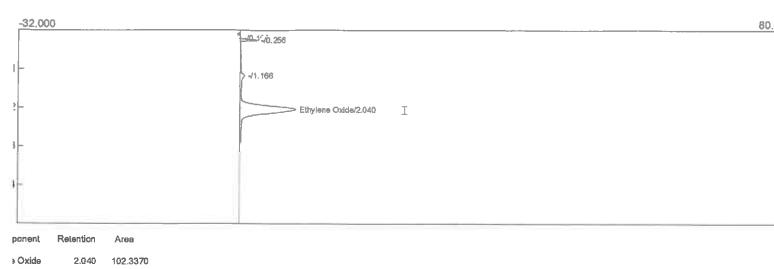
Analysis date: 05/30/2019 12:48:24
Description: Channel 2-Out
Data file: GP_out_697.chr ()
Sample: Run_1_Inj.16

16



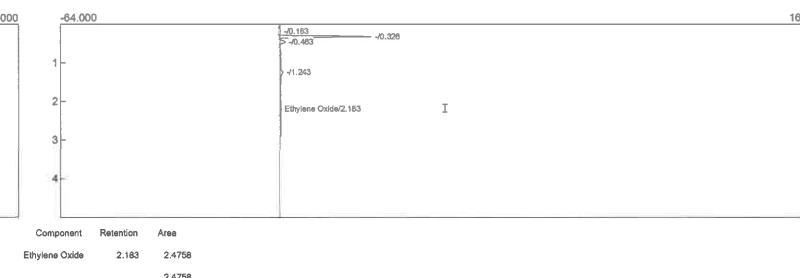
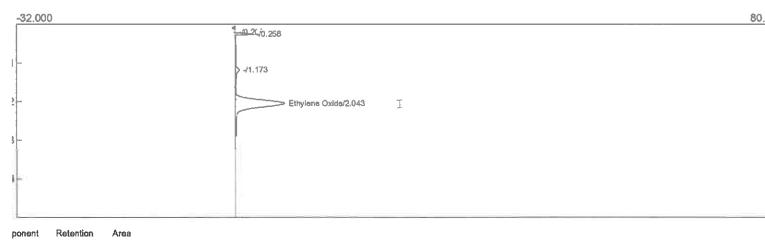
sis date: 05/30/2019 12:51:24
cription: Channel 3-IN
Data file: GP_In_698.CHR()
Sample: Run_1_Inj.17

Analysis date: 05/30/2019 12:51:24
Description: Channel 2-Out
Data file: GP_Out_698.chr()
Sample: Run_1_Inj.17



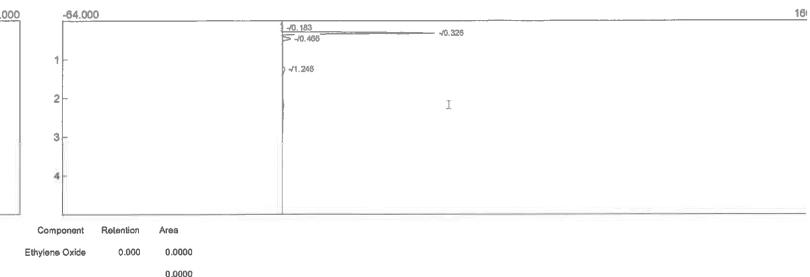
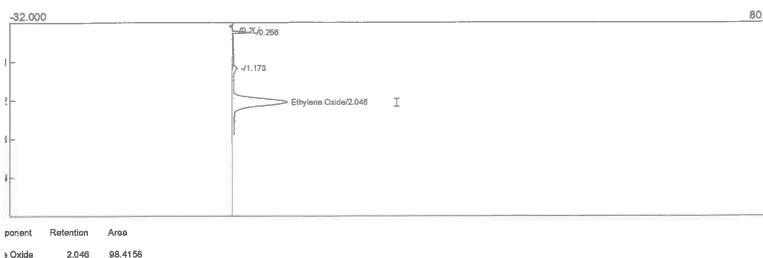
sis date: 05/30/2019 12:54:24
cription: Channel 3-IN
Data file: GP_in_699.CHR ()
Sample: Run_1_Inj.18

Analysis date: 05/30/2019 12:54:24
Description: Channel 2-Out
Data file: GP_out_699.chr ()
Sample: Run_1_Inj.18

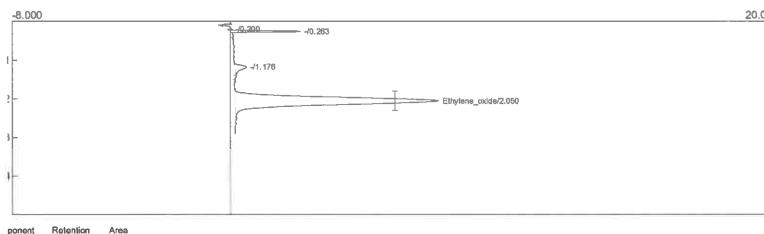


sis date: 05/30/2019 12:57:24
cription: Channel 3-In
Data file: GP_in_700.CHR()
Sample: Run_1_Inj.19

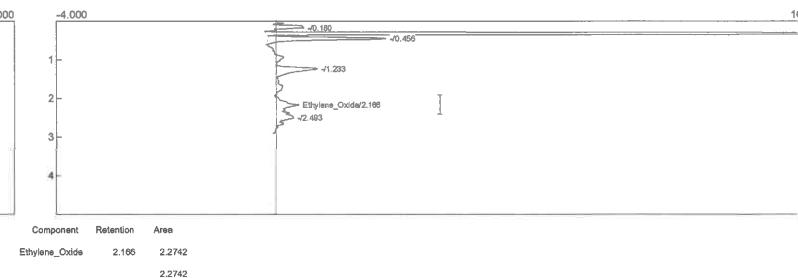
Analysis date: 05/30/2019 12:57:24
Description: Channel 2-Out
Data file: GP_out_700.chr()
Sample: Run_1_Inj.19



Analysis date: 05/30/2019 13:00:24
Description: Channel 3-IN
Data file: GP_In_701.CHR ()
Sample: Run_1_Inj.20

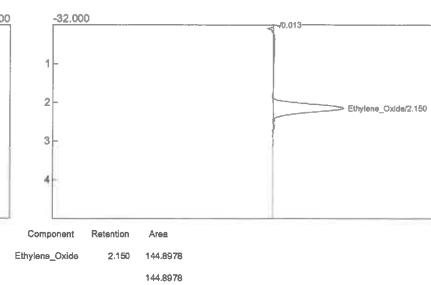
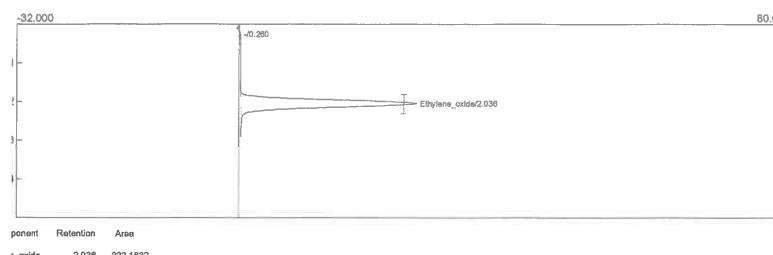


Analysis date: 05/30/2019 13:03:24
Description: Channel 2-Out
Data file: GP_out_701.CHR ()
Sample: Run_1_Inj.20

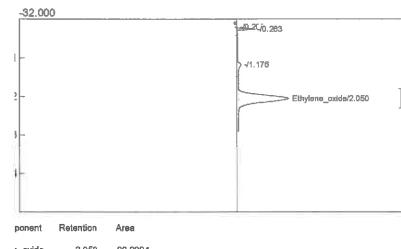


Analysis date: 05/30/2019 13:03:24
Description: Channel 3-IN
Data file: GP_In_702.CHR()
Sample: Post Run 1 Mid Cal

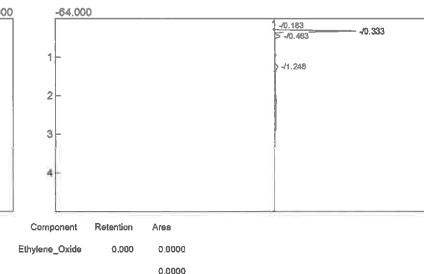
Analysis date: 05/30/2019 13:03:24
Description: Channel 2-Out
Data file: GP_out_702.chr()
Sample: Post Run 1 Mid Cal



Analysis date: 05/30/2019 13:09:25
Description: Channel 3-IN
Data file: GP_In_704.CHR()
Sample: Run_2_Inj.1

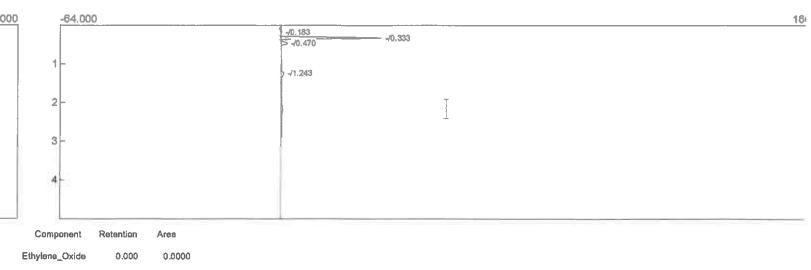


Analysis date: 05/30/2019 13:09:25
Description: Channel 2-Out
Data file: GP_out_704.CHR()
Sample: Run_2_Inj.1



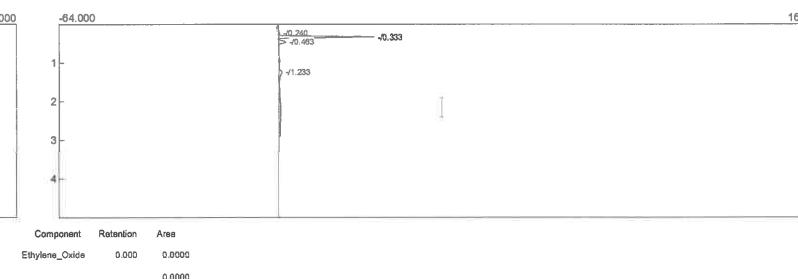
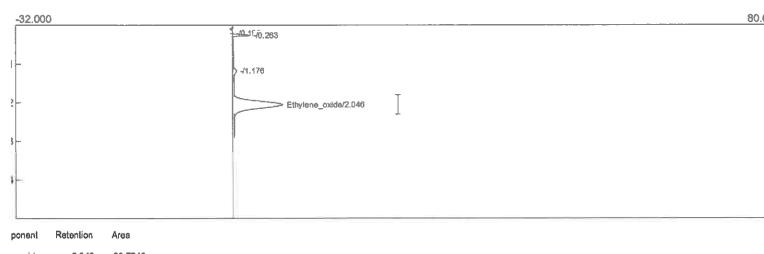
sis date: 05/30/2019 13:12:25
scripton: Channel 3-IN
Data file: GP_in_705.CHR()
Sample: Run_2_Inj.2

Analysis date: 05/30/2019 13:12:25
Description: Channel 2-Out
Data file: GP_out_705.chr()
Sample: Run_2_Inj.2



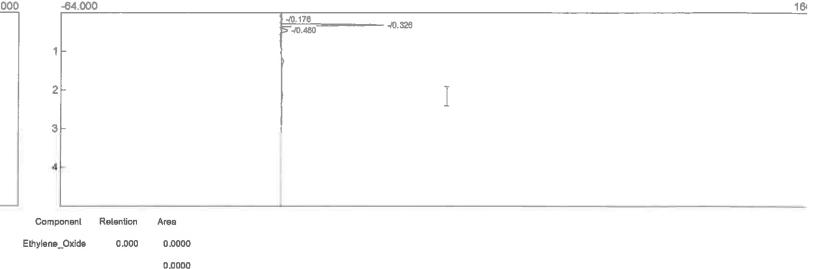
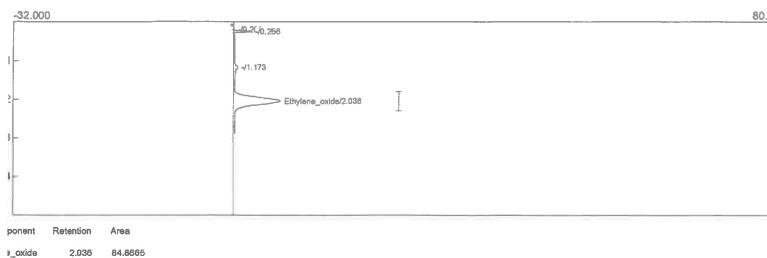
Analysis date: 05/30/2019 13:15:25
Description: Channel 3-IN
Data file: GP_in_706.CHR()
Sample: Run_2_Inj.3

Analysis date: 05/30/2019 13:15:25
Description: Channel 2-Out
Data file: GP_out_706.chr()
Sample: Run_2_Inj.3



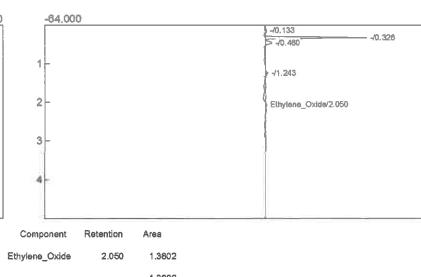
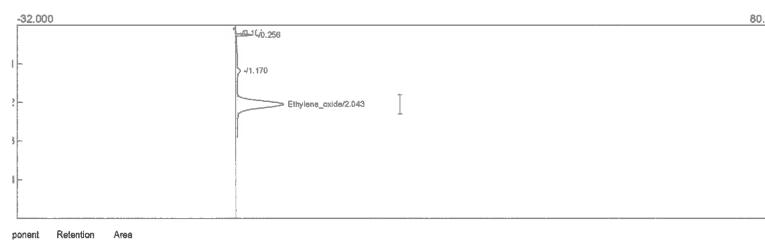
Analysis date: 05/30/2019 13:18:25
Description: Channel 3-IN
Data file: GP_inj_707.CHR()
Sample: Run_2_Inj.4

Analysis date: 05/30/2019 13:18:25
Description: Channel 2-Out
Data file: GP_out_707.chr()
Sample: Run_2_Inj.4



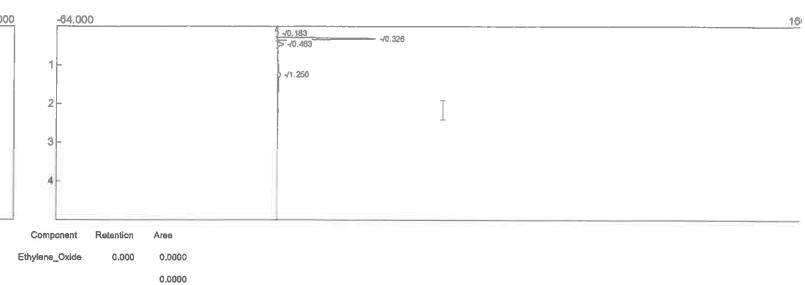
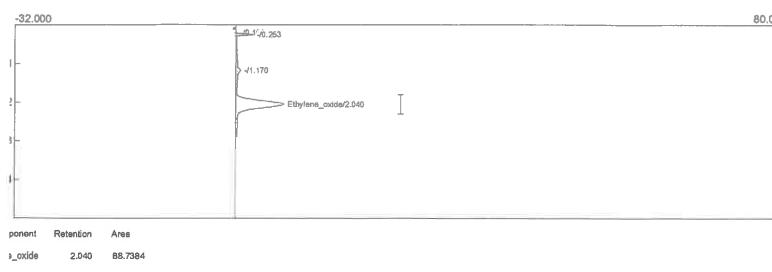
sis date: 05/30/2019 13:21:25
cription: Channel 3-IN
Data file: GP_in_708.CHR ()
Sample: Run_2_Inj.5

Analysis date: 05/30/2019 13:21:25
Description: Channel 2-Out
Data file: GP_out_708.chr ()
Sample: Run_2_Inj.5



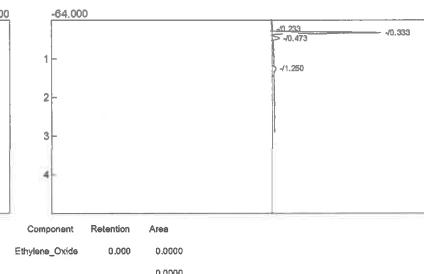
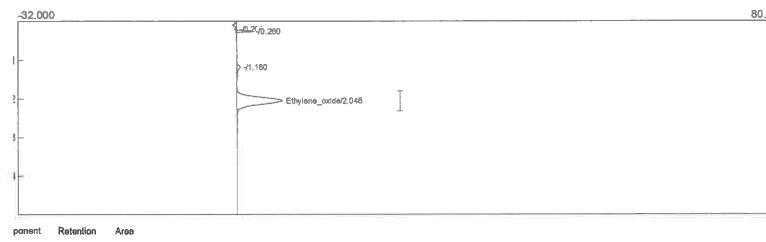
sis date: 05/30/2019 13:24:25
cription: Channel 3-IN
Data file: GP_in_709.CHR()
Sample: Run_2_Inj.6

Analysis date: 05/30/2019 13:24:25
Description: Channel 2-Out
Data file: GP_out_709.chr()
Sample: Run_2_Inj.6



sis date: 05/30/2019 13:27:25
cription: Channel 3-IN
Data file: GP_in_710.CHR()
Sample: Run_2_Inj.7

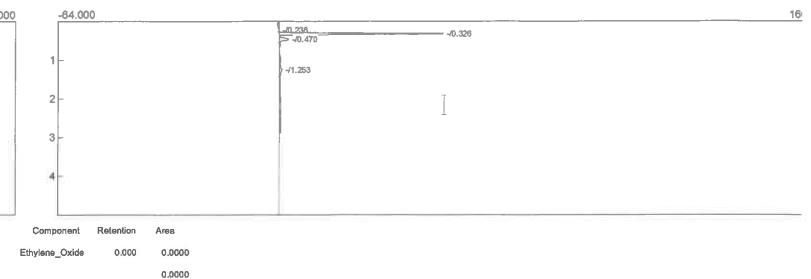
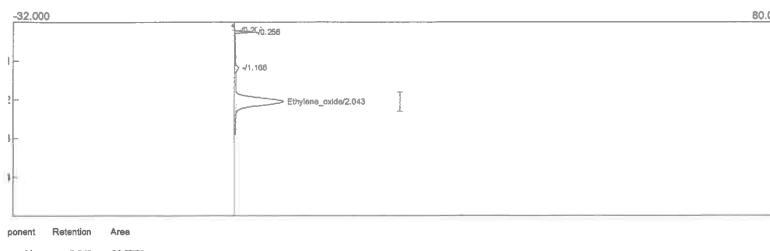
Analysis date: 05/30/2019 13:27:25
Description: Channel 2-Out
Data file: GP_out_710.chr()
Sample: Run_2_Inj.7



16

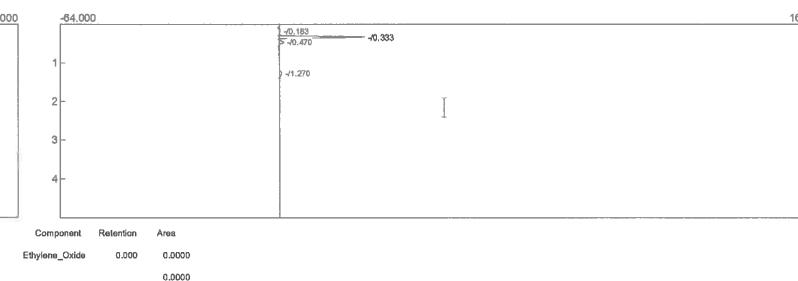
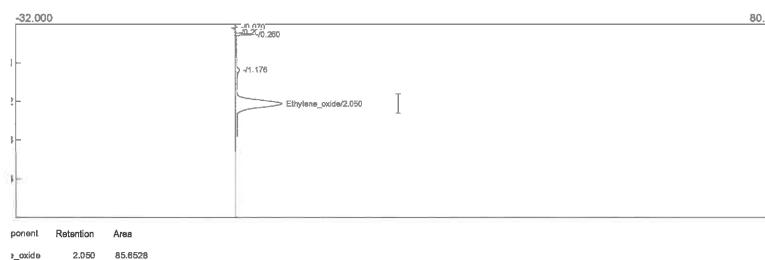
Analysis date: 05/30/2019 13:30:25
Description: Channel 3-In
Data file: GP_in_711.CHR()
Sample: Run_2_Inj8

Analysis date: 05/30/2019 13:30:25
Description: Channel 2-Out
Data file: GP_out_711.chr()
Sample: Run_2_Inj8



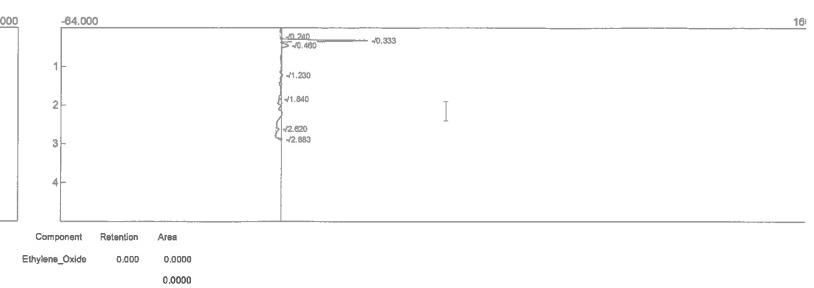
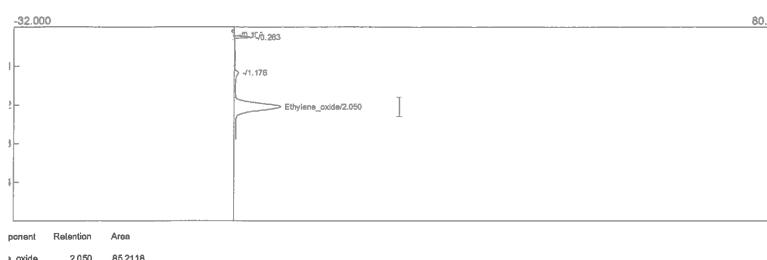
sis date: 05/30/2019 13:33:25
cription: Channel 3-IN
Data file: GP_in_712.CHR ()
Sample: Run_2_Inj.9

Analysis date: 05/30/2019 13:33:25
Description: Channel 2-Out
Data file: GP_out_712.CHR ()
Sample: Run_2_Inj.9



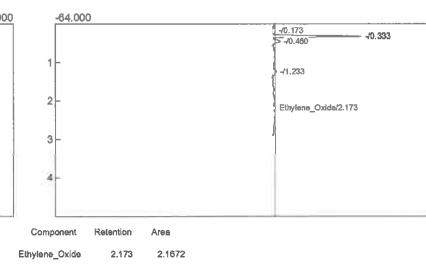
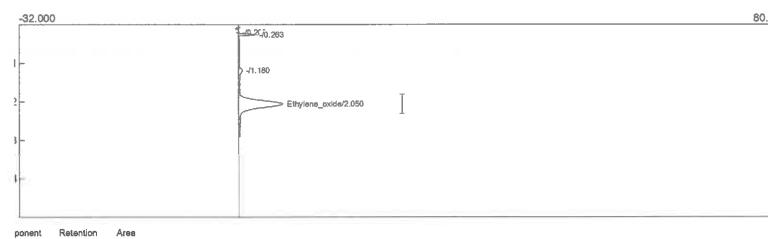
Analysis date: 05/30/2019 13:36:25
Description: Channel 3-IN
Data file: GP_In_713.CHR()
Sample: Run_2_Inj.10

Analysis date: 05/30/2019 13:36:25
Description: Channel 2-Out
Data file: GP_out_713.chr()
Sample: Run_2_Inj.10



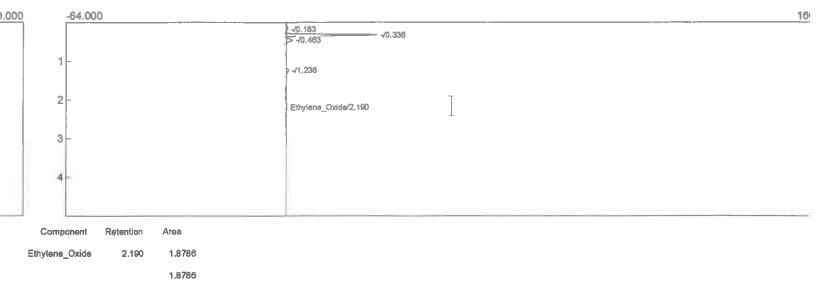
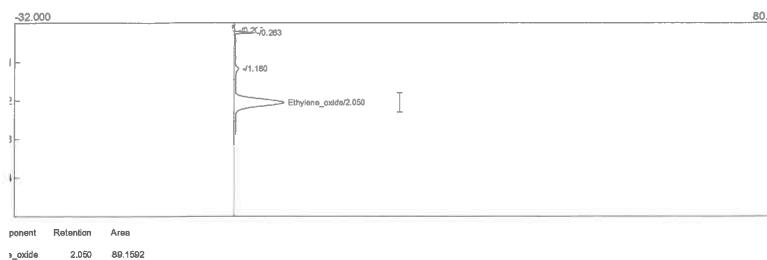
sis date: 05/30/2019 13:39:25
cription: Channel 3-IN
Data file: GP_in_714.CHR()
Sample: Run_2_Inj.11

Analysis date: 05/30/2019 13:39:25
Description: Channel 2-Cut
Data file: GP_out_714.chr()
Sample: Run_2_Inj.11



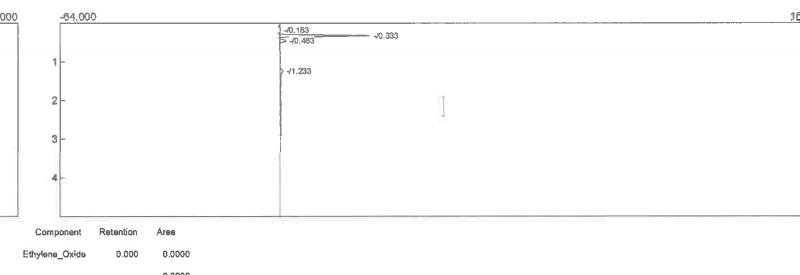
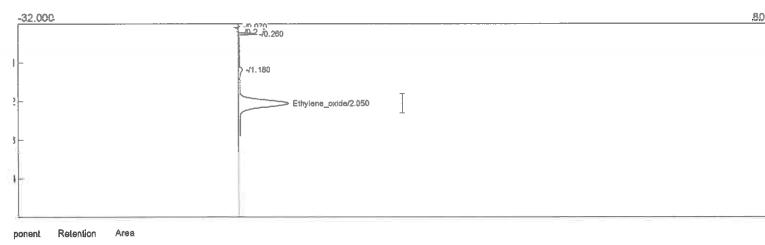
Analysis date: 05/30/2019 13:42:25
Description: Channel 3-In
Data file: GP_In_715.CHR()
Sample: Run_2_Inj.12

Analysis date: 05/30/2019 13:42:25
Description: Channel 2-Out
Data file: GP_out_715.chr()
Sample: Run_2_Inj.12



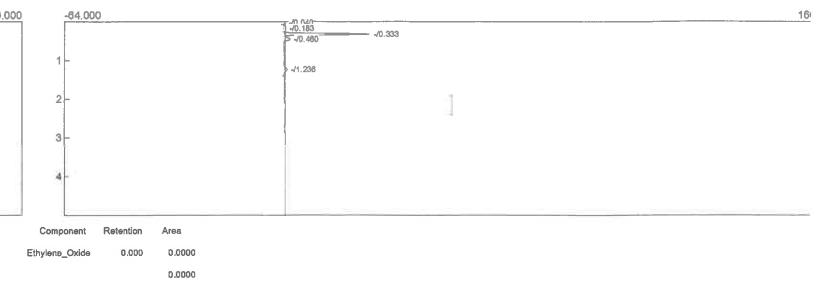
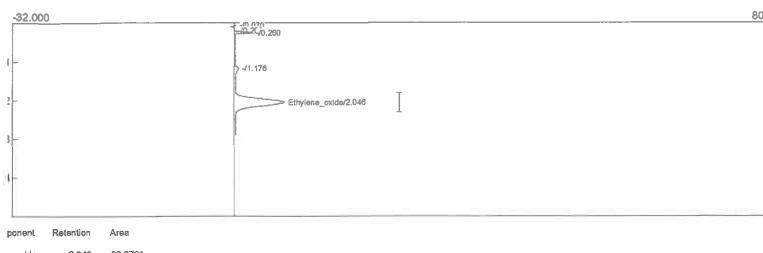
sis date: 05/30/2019 13:45:25
cription: Channel 3-IN
Data file: GP_inj_716.CHR ()
Sample: Run_2_Inj.13

Analysis date: 05/30/2019 13:45:25
Description: Channel 2-Out
Data file: GP_out_716.CHR ()
Sample: Run_2_Inj.13



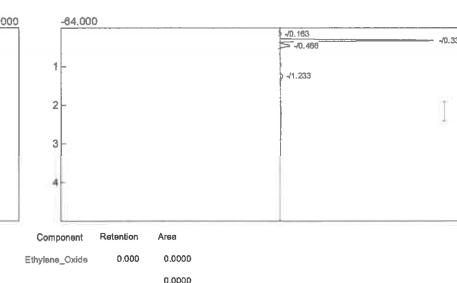
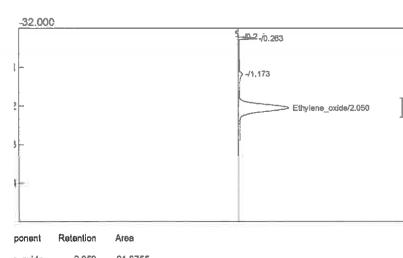
Analysis date: 05/30/2019 13:48:25
Description: Channel 3-In
Data file: GP_In_717.CHR()
Sampler: Run_2_Inj.14

Analysis date: 05/30/2019 13:48:25
Description: Channel 2-Out
Data file: GP_out_717.chr()
Sample: Run_2_Inj.14



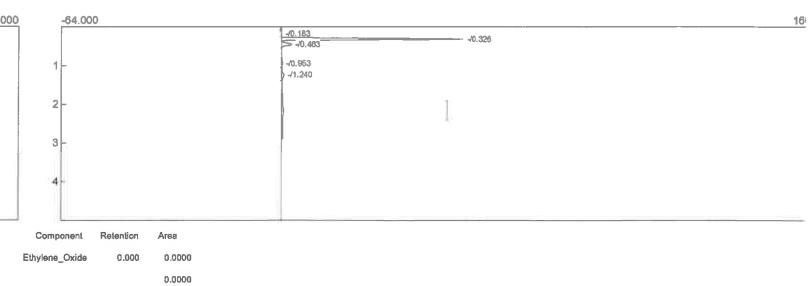
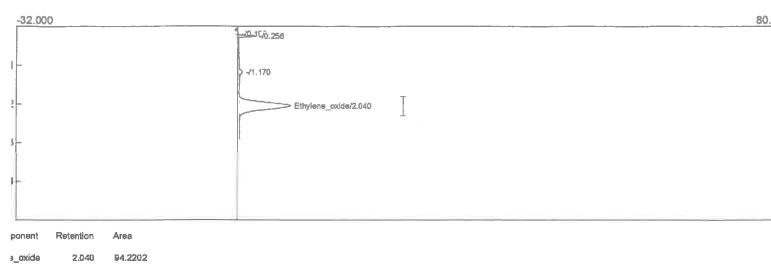
Analysis date: 05/30/2019 13:51:25
Description: Channel 3-IN
Data file: GP_in_718.CHR()
Sample: Run_2_Inj_15

Analysis date: 05/30/2019 13:51:25
Description: Channel 2-Out
Data file: GP_out_718.CHR()
Sample: Run_2_Inj_15



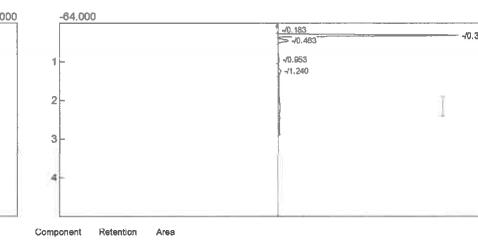
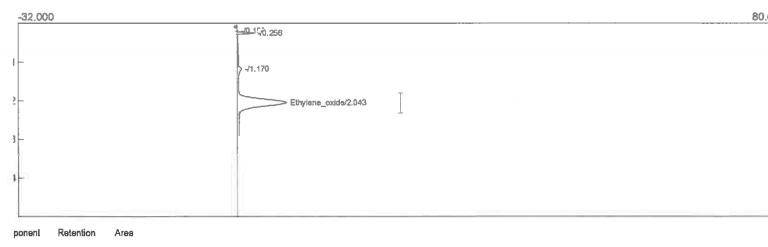
Analysis date: 05/30/2019 13:54:25
Description: Channel 3-IN
Data file: GP_In_719.CHR()
Sample: Run_2_Inj.16

Analysis date: 05/30/2019 13:54:25
Description: Channel 2-Out
Data file: GP_out_719.hdr()
Sample: Run_2_Inj.16



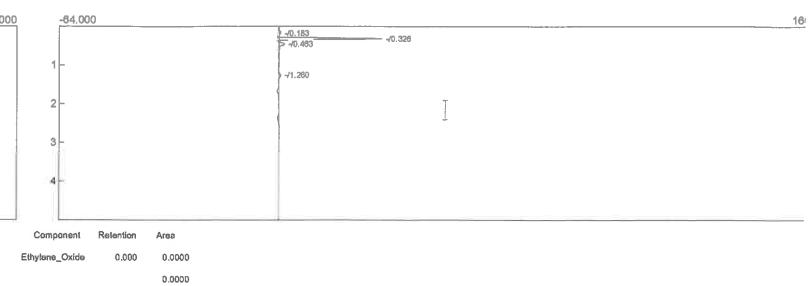
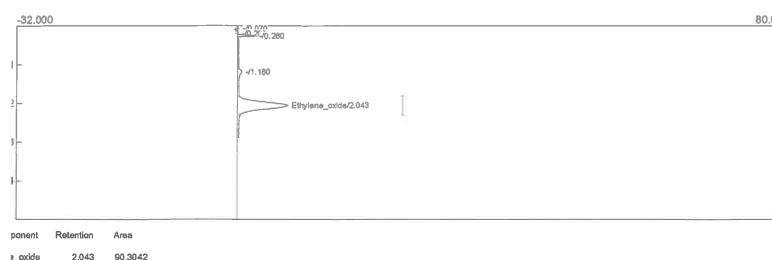
sis date: 05/30/2019 13:57:25
cription: Channel 3-IN
Data file: GP_In_720.CHR()
Sample: Run_2_Inj.17

Analysis date: 05/30/2019 13:54:25
Description: Channel 2-Out
Data file: GP_out_720.chr()
Sample: Run_2_Inj.17



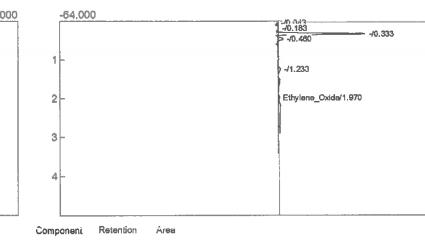
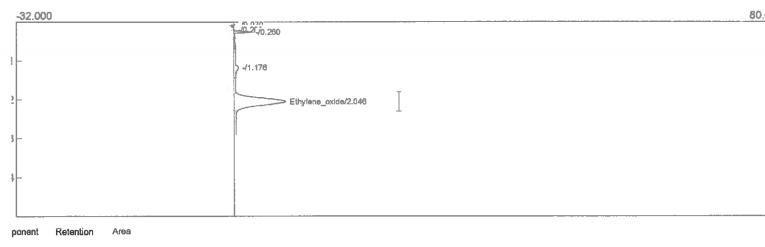
Analysis date: 05/30/2019 14:00:25
Description: Channel 3-IN
Data file: GP_In_721.CHR()
Sample: Run_2_Inj.18

Analysis date: 05/30/2019 13:57:25
Description: Channel 2-Out
Data file: GP_out_721.chr()
Sample: Run_2_Inj.18



sis date: 05/30/2019 14:03:25
cription: Channel 3-IN
Data file: GP_in_722.CHR()
Sample: Run_2_Inj.19

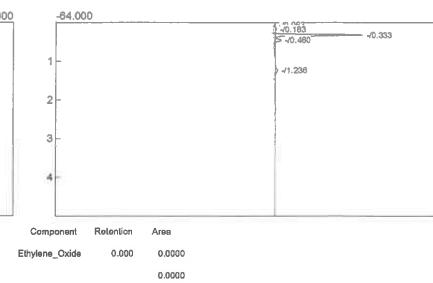
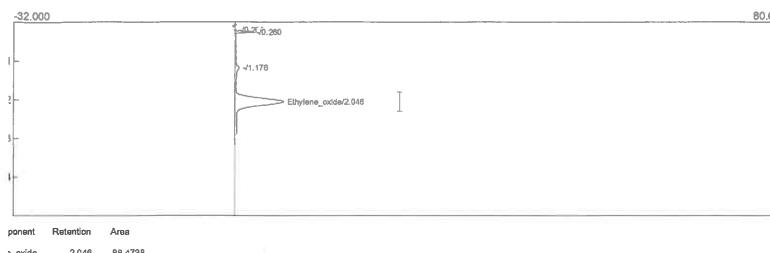
Analysis date: 05/30/2019 14:00:25
Description: Channel 2-Out
Data file: GP_out_722.chr()
Sample: Run_2_Inj.19



Analysis date: 05/30/2019 14:06:25
Description: Channel 3-IN
Data file: GP_in_723.CHR()
Sample: Run_2_Inj_20

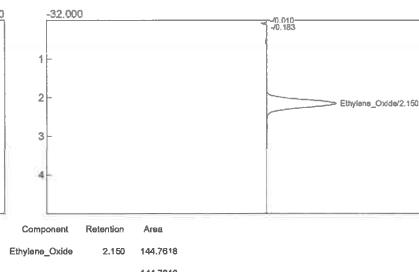
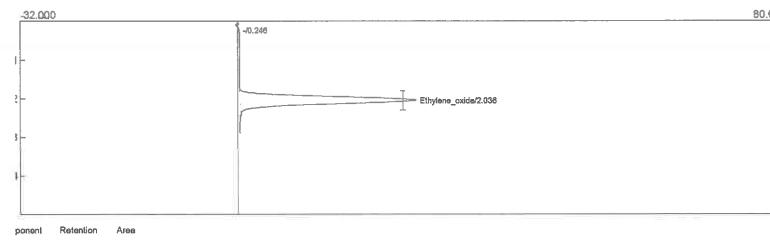
Analysis date: 05/30/2019 14:03:25
Description: Channel 2-Out
Data file: GP_out_723.chr()
Sample: Run_2_Inj_20

16



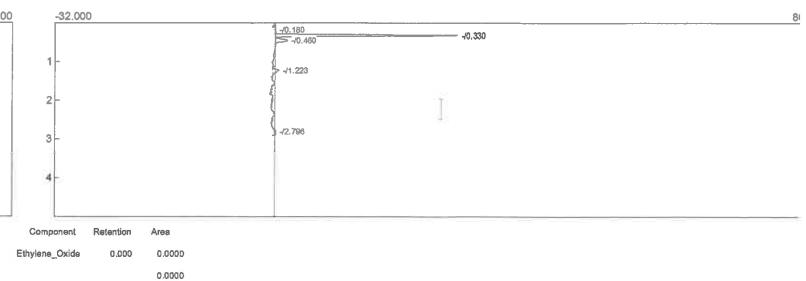
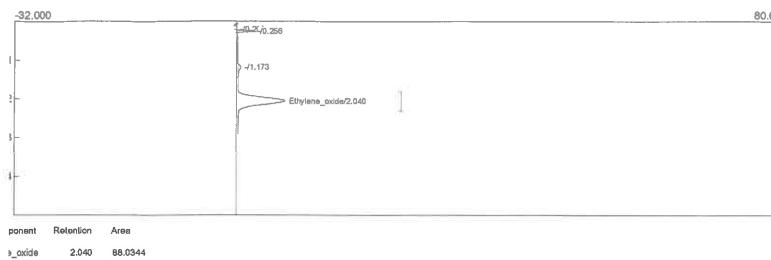
Analysis date: 05/30/2019 14:24:25
Description: Channel 3-IN
Data file: GP_in_735.CHR()
Sample: Run 2 Post Mid Cal

Analysis date: 05/30/2019 14:24:25
Description: Channel 2-Out
Data file: GP_out_735.chr()
Sample: Run 2 Post Mid Cal



sis date: 05/30/2019 14:57:26
cription: Channel 3-N
Data file: GP_In_740.CHR ()
Sample: Run_3_Inj.1

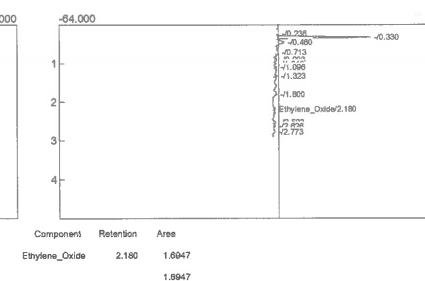
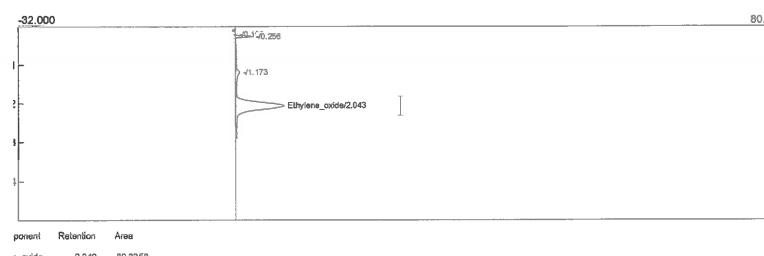
Analysis date: 05/30/2019 14:57:26
Description: Channel 2-Out
Data file: GP_out_740.CHR ()
Sample: Run_3_Inj.1



sis date: 05/30/2019 15:00:26
Description: Channel 3-IN
Data file: GP_in_741.CHR ()
Sample: Run_3_Inj. 2

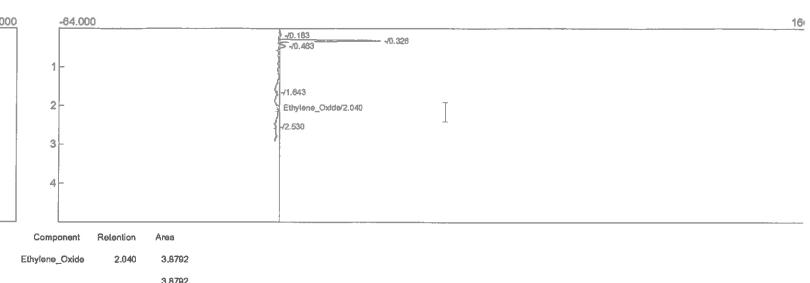
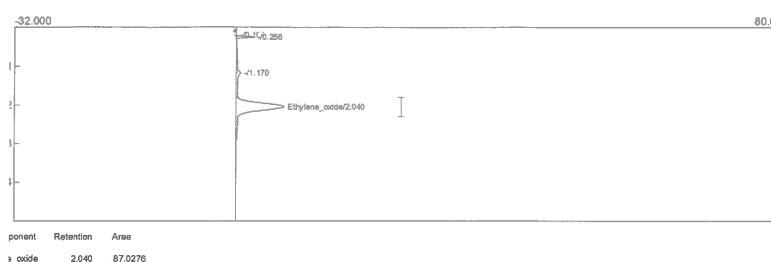
Analysis date: 05/30/2019 15:00:26
Description: Channel 2-Out
Data file: GP_out_741.chr ()
Sampler: Run_3_Inj. 2

16



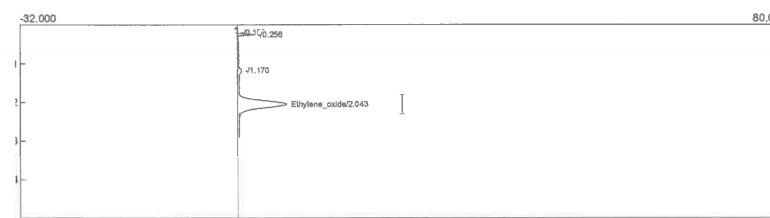
sis date: 05/30/2019 15:03:26
cription: Channel 3-IN
Data file: GP_In_742.CHR()
Sample: Run_3_Inj.3

Analysis date: 05/30/2019 15:03:26
Description: Channel 2-Out
Data file: GP_Out_742.chr()
Sample: Run_3_Inj.3

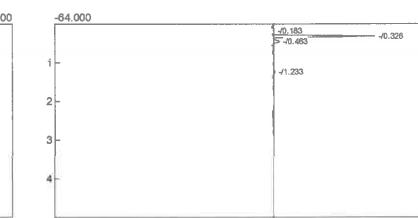


sis date: 05/30/2018 15:06:26
cription: Channel 3-IN
Data file: GP_In_743.CHR()
Sample: Run_3_In.j4

Analysis date: 05/30/2018 15:06:26
Description: Channel 2-Out
Data file: GP_Out_743.chr()
Sample: Run_3_In.j4



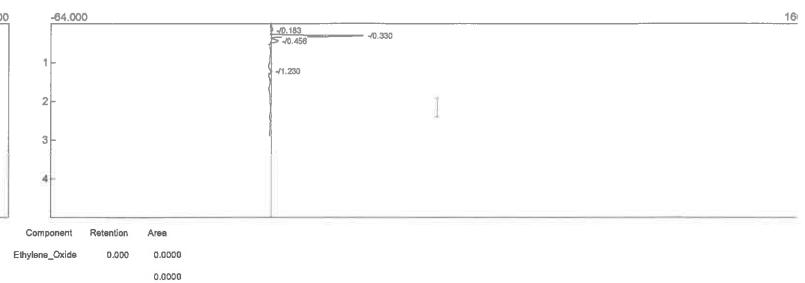
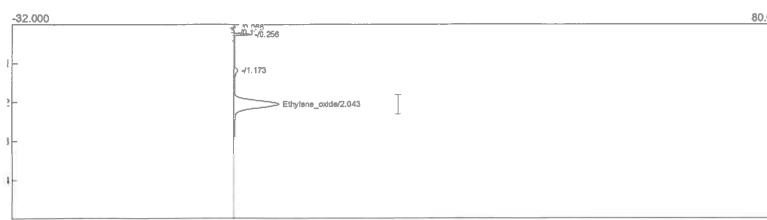
ponent	Retention	Area
Ethylene_oxide	2.043	91,366
		91,366



Component	Retention	Area
Ethylene_Oxide	0.000	0.0000
		0.0000

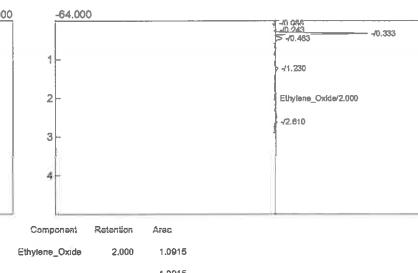
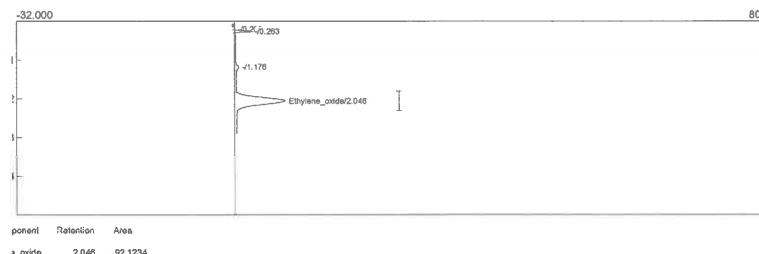
sis date: 05/30/2019 15:09:26
cription: Channel 3-In
Data file: GP_In_744.CHR()
Sample: Run_3_Inj.5

Analysis date: 05/30/2019 15:09:26
Description: Channel 2-Out
Data file: GP_Out_744.chr()
Sample: Run_3_Inj.5



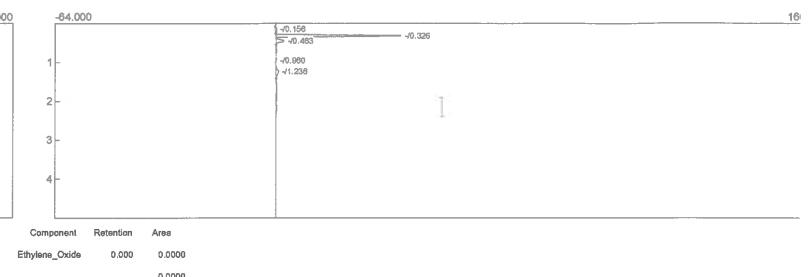
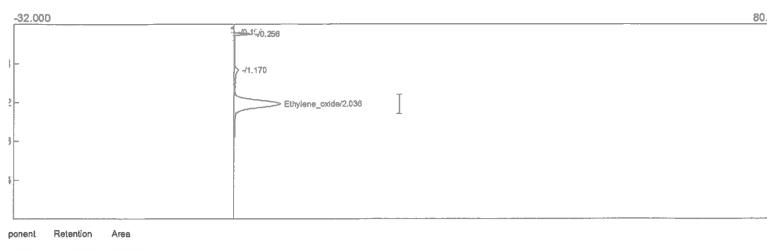
sis date: 05/30/2019 15:12:26
cription: Channel 3-IN
Data file: GP_in_745.CHR()
Sample: Run_3_Inj.6

Analysis date: 05/30/2019 15:12:26
Description: Channel 2-Out
Data file: GP_out_745.CHR()
Sample: Run_3_Inj.6



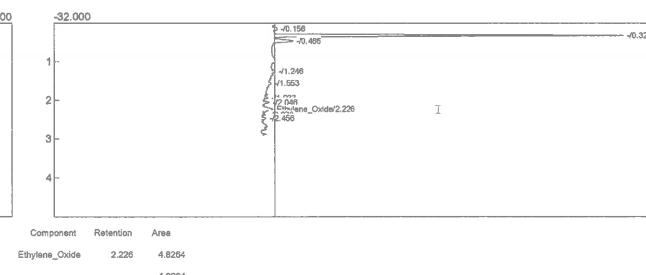
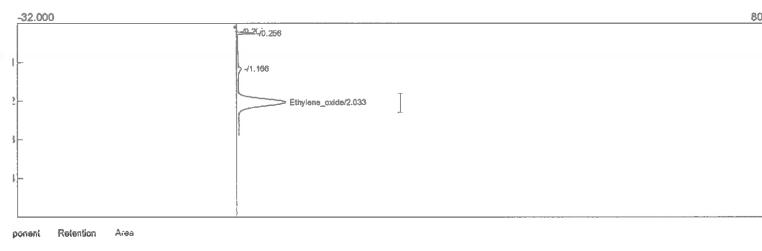
sis date: 05/30/2019 15:15:26
cription: Channel 3-N
Data file: GP_In_746.CHR()
Sample: Run_3_Inj.7

Analysis date: 05/30/2019 15:15:26
Description: Channel 2-Cut
Data file: GP_out_746.chr()
Sample: Run_3_Inj.7



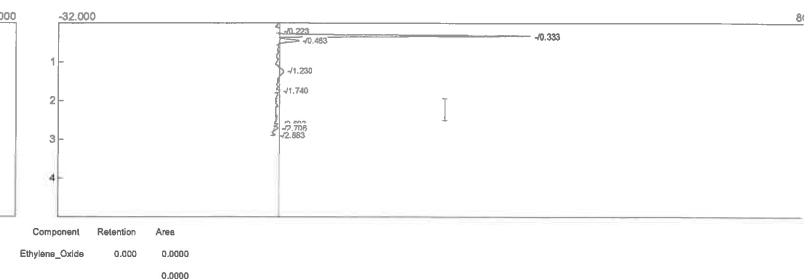
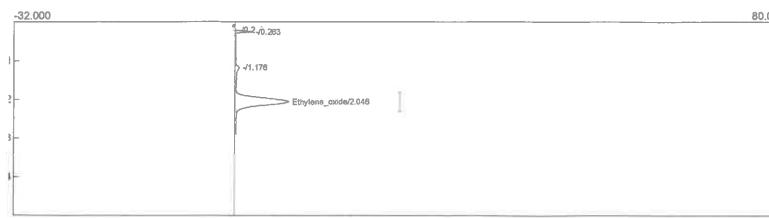
sis date: 05/30/2019 15:18:26
cription: Channel 3-IN
Data file: GP_in_747.CHR()
Sample: Run3_Inj.8

Analysis date: 05/30/2019 15:18:26
Description: Channel 2-Out
Data file: GP_out_747.chr()
Sample: Run3_Inj.8



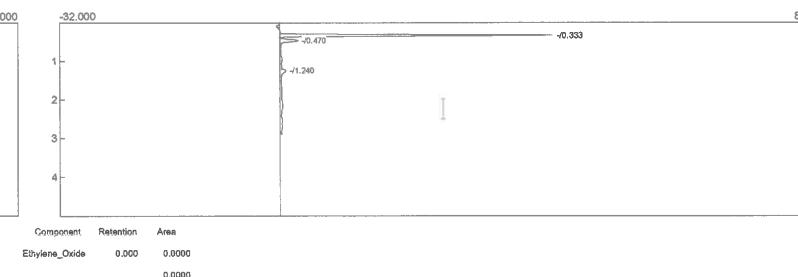
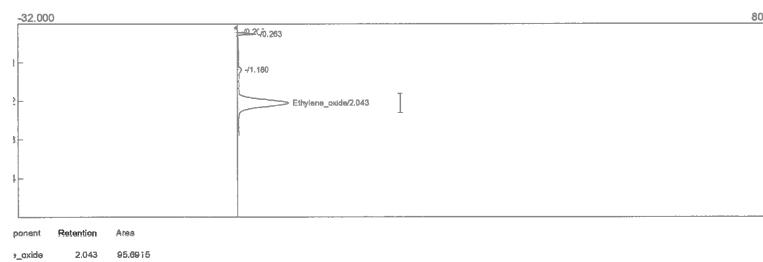
sis date: 05/30/2019 16:21:26
cription: Channel 3-IN
Data file: GP_in_748.CHR ()
Sample: Run_3_Inj.9

Analysis date: 05/30/2019 16:21:26
Description: Channel 2-Out
Data file: GP_out_748.CHR ()
Sample: Run_3_Inj.9



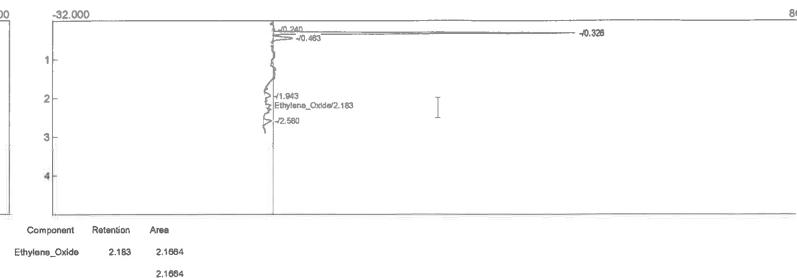
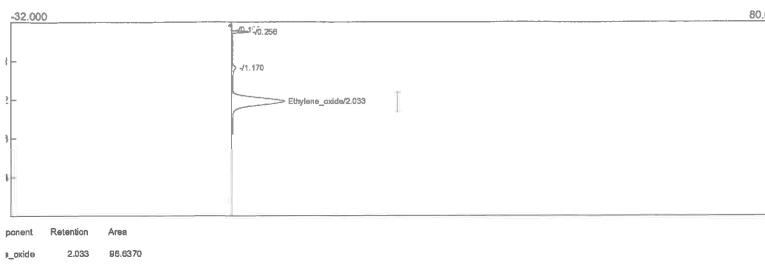
sis date: 05/30/2019 15:24:26
cription: Channel 3-IN
Data file: GP_in_749.CHR()
Sample: Run_3_Inj.10

Analysis date: 05/30/2019 15:24:26
Description: Channel 2-Out
Data file: GP_out_749.chr()
Sample: Run_3_Inj.10



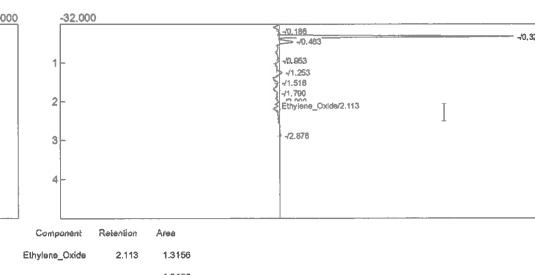
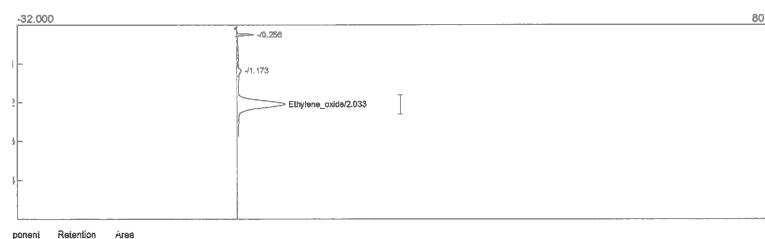
sis date: 05/30/2019 15:27:26
cription: Channel 3-IN
Data file: GP_in_750.CHR()
Sample: Run_3_In.j11

Analysis date: 05/30/2019 15:27:26
Description: Channel 2-Out
Data file: GP_out_750.chr()
Sample: Run_3_In.j11



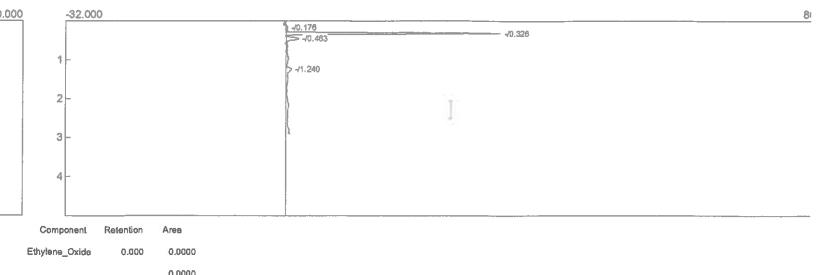
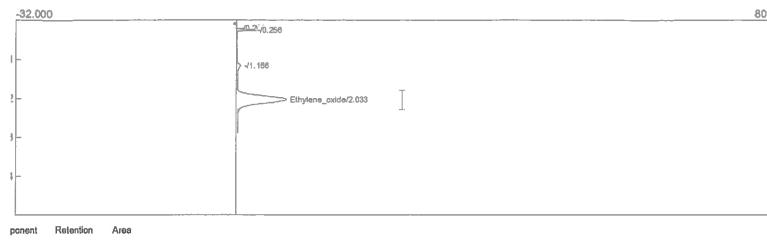
sis date: 05/20/2019 15:30:26
cription: Channel 3-IN
Data file: GP_in_751.CHR ()
Sample: Run3_Inj.12

Analysis date: 05/20/2019 15:30:26
Description: Channel 2-Out
Data file: GP_out_751.chr ()
Sample: Run3_Inj. 12



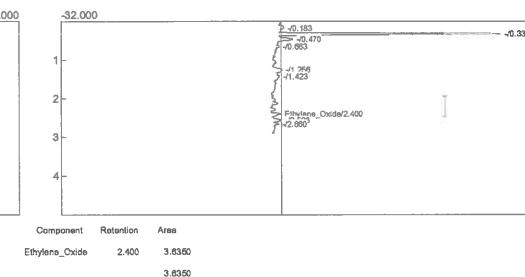
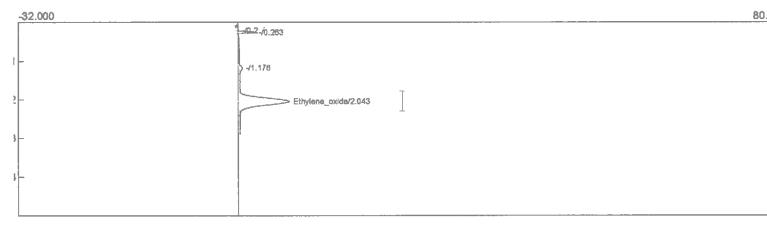
sis date: 05/30/2019 15:33:26
cription: Channel 3-IN
Data file: GP_in_752.CHR ()
Sample: Run_3_Inj. 13

Analysis date: 05/30/2019 15:33:26
Description: Channel 3-Out
Data file: GP_out_752.chr ()
Sample: Run_3_Inj. 13



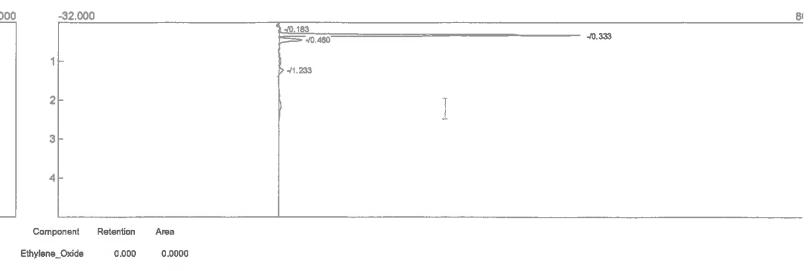
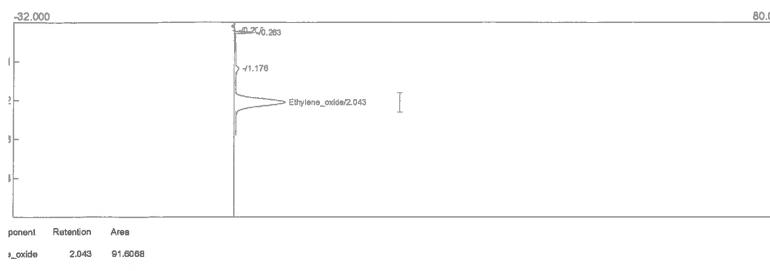
sis date: 05/30/2019 15:36:26
cription: Channel 3-IN
Data file: GP_In_753.CHR()
Sample: Run_3_Inj.14

Analysis date: 05/30/2019 15:36:26
Description: Channel 2-Out
Data file: GP_out_753.ohr()
Sample: Run_3_Inj.14



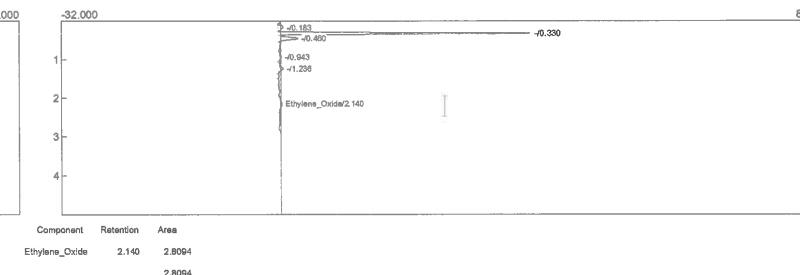
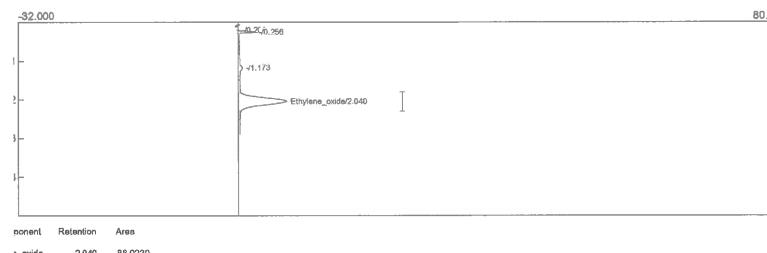
sis date: 05/30/2019 15:39:26
cription: Channel 3-IN
Data file: GP_In_754.CHR ()
Sample: Run_3_Inj.15

Analysis date: 05/30/2019 15:39:26
Description: Channel 2-Cut
Data file: GP_out_754.chr ()
Sample: Run_3_Inj.15



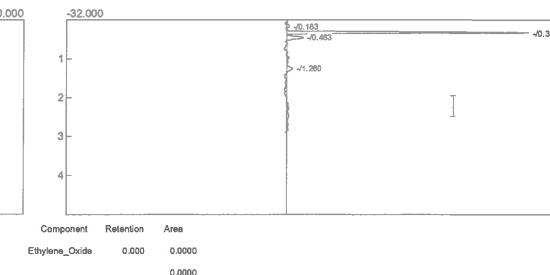
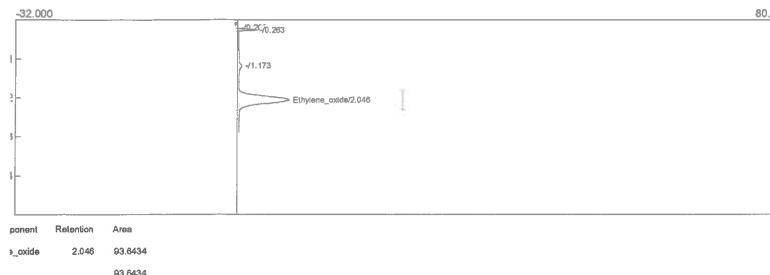
sis date: 05/30/2019 15:42:26
cription: Channel 3-IN
Data file: GP_In_755.CHR ()
Sample: Run_3_Inj.16

Analysis date: 05/30/2019 15:42:26
Description: Channel 2-Out
Data file: GP_out_755.CHR ()
Sample: Run_3_Inj.16



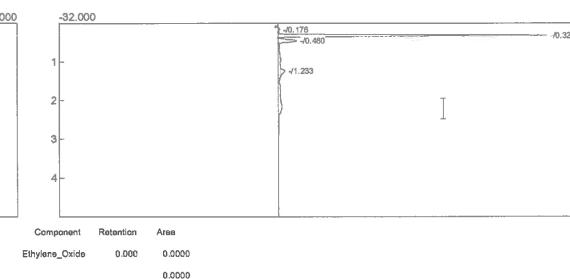
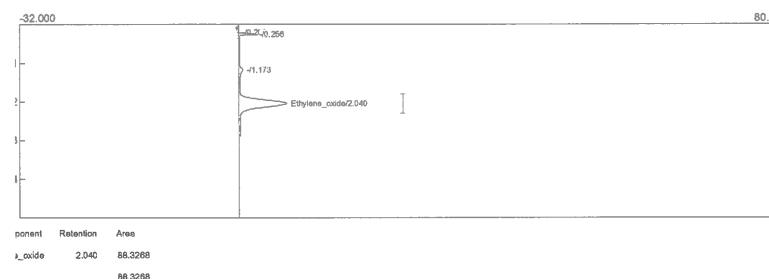
sis date: 05/30/2019 15:45:26
cription: Channel 3-IN
Data file: GP_In_756.CHR ()
Sample: Run_3_Inj.17

Analysis date: 05/30/2019 15:45:26
Description: Channel 2-Out
Data file: GP_Out_756.chr ()
Sample: Run_3_Inj.17



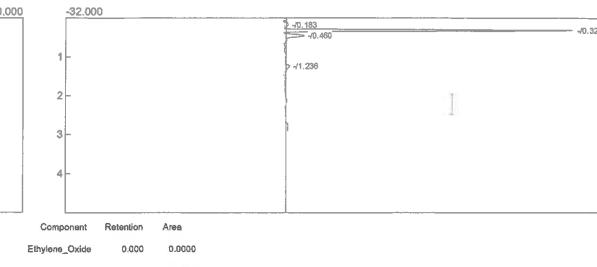
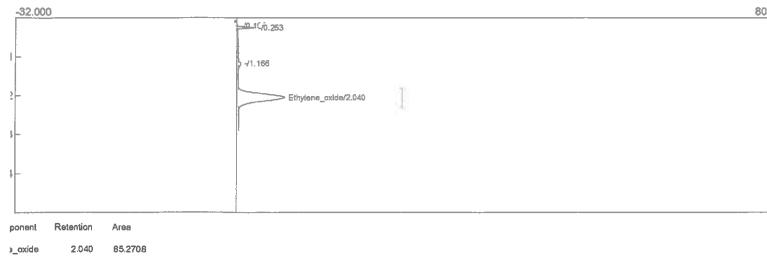
sis date: 05/30/2019 15:48:27
cription: Channel 3-IN
Data file: GP_In_757.CHR ()
Sample: Run_3_Inj.18

Analysis date: 05/30/2019 15:48:27
Description: Channel 2-Out
Data file: GP_out_757.chr ()
Sample: Run_3_Inj.18



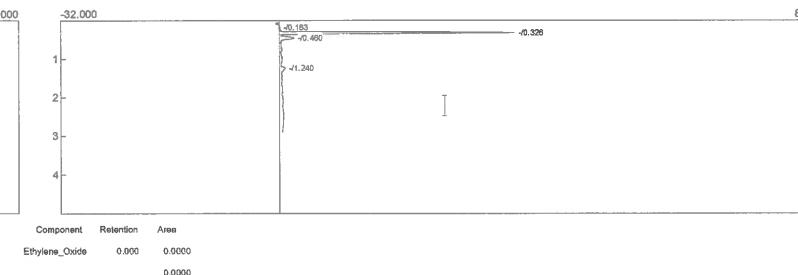
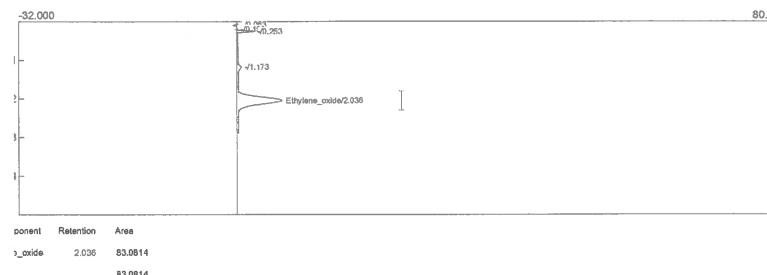
sis date: 05/30/2019 15:51:27
writelot: Channel 3-IN
Data file: GP_in_758.CHR ()
Sample: Run_3_Inj.19

Analysis date: 05/30/2019 15:51:27
Description: Channel 3-Out
Data file: GP_out_758.chr ()
Sample: Run_3_Inj.19



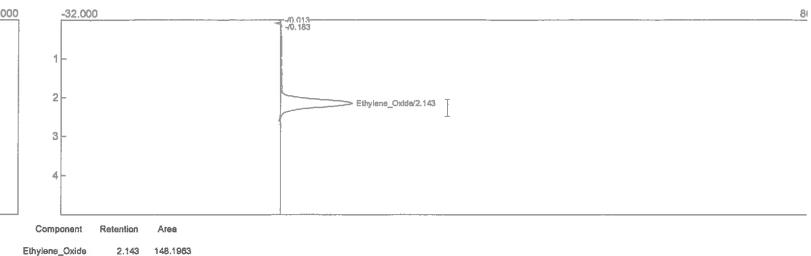
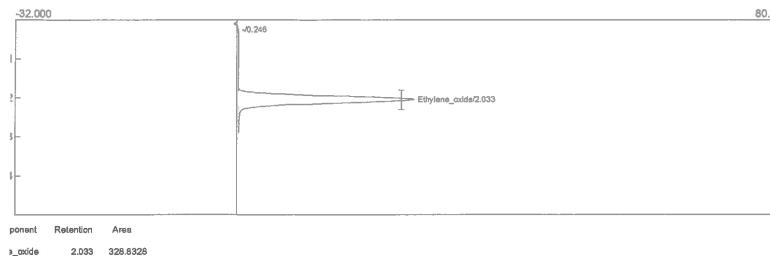
sis date: 05/30/2019 15:54:27
Description: Channel 3-IN
Data file: GP_in_759.CHR ()
Sample: Run_3_Inj.20

Analysis date: 05/30/2019 15:54:27
Description: Channel 2-Out
Data file: GP_out_759.chr ()
Sample: Run_3_Inj.20



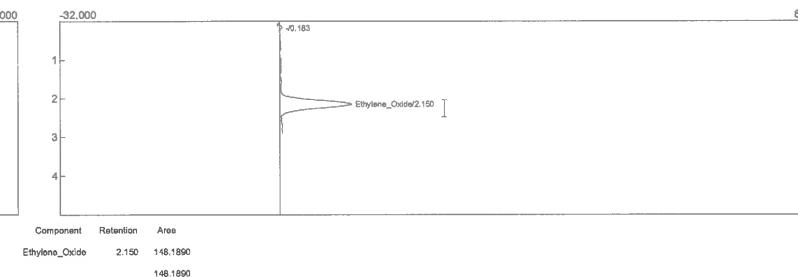
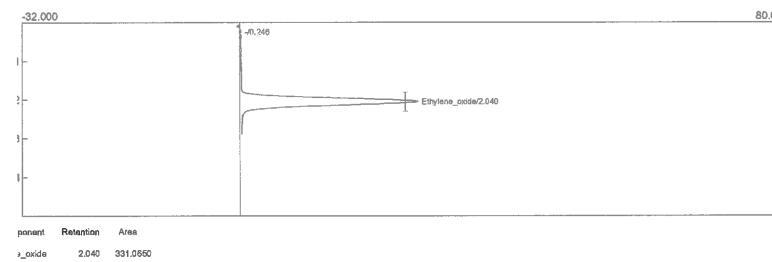
els date: 05/30/2019 16:03:27
cription: Channel 3-IN
Data file: GP_In_762.CHR ()
Sample: Final Mid Cal

Analysis date: 05/30/2019 16:03:27
Description: Channel 3-Out
Data file: GP_Out_762.chr ()
Sample: Final Mid Cal



sis date: 05/30/2019 16:06:27
cription: Channel 3-IN
Data file: GP_in_763.CHR ()
Sample: Final Mid Cal

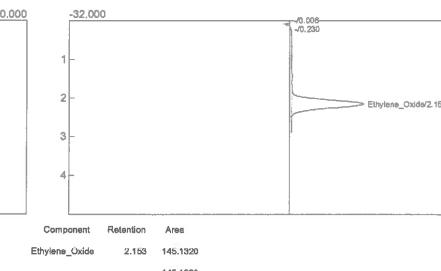
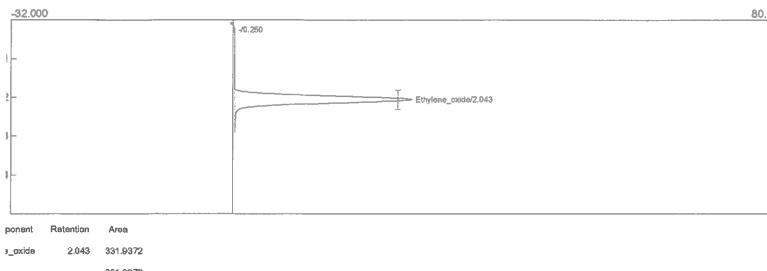
Analysis date: 05/30/2019 16:06:27
Description: Channel 2-Out
Data file: GP_out_763.CHR ()
Sample: Final Mid Cal



sis date: 05/30/2019 16:09:27
cription: Channel 3-In
Data file: GP_In_764.CHR ()
Sample: Final Mid Cal

Analysis date: 05/30/2019 16:09:27
Description: Channel 2-Out
Data file: GP_out_764.chr ()
Sample: Final Mid Cal

b1



Hydrocarbon Laboratories

Date: 15-May-19

Customer: TRC Environmental Corp
9225 US Highway 183 S
Austin, TX 78747

PO#: 13724
WOF: no
Part #: 1405

Date of Production: 05/15/19
Expiration Date: 05/15/20

Cylinder Number: CC516369
Cylinder Size: AL150
CGA: 350

Type: Gas
Make Units: Mole
Product Class: Certified

Pressure: 2000 psig
Dewpoint: 32 deg. F

Component	Concentration Requested	Actual	Accuracy
Ethylene Oxide	500 ppm	499 ppm	2%
Nitrogen	Balance	Balance	Balance

This mixture was manufactured gravimetrically on laboratory balances calibrated with N.I.S.T. traceable weights.

Certified by:

K.C.

Ph: 281-840-0781 www.hydrocarbonlaboratories.com

Hydrocarbon Laboratories

Date: 05/15/19

Customer: TCEQ Environmental Corp.
1204 S Highway 183 S
Austin, TX 78747

PO# 13754

WO# 713

Part #: 14055

Date of Production: 05/15/19
Expiration Date: 05/15/20

Cylinder Number: CC516379
Cylinder Size: AL150
CGA: 350

Type: Gas
Make Units: Mole
Product Class: Certified

Pressure: 2000 psig
Dewpoint: 32 deg F

Component	Requested	Concentration	Accuracy
Ethylene Oxide	10 ppm	10.0 ppm	2%
Nitrogen	Balance	Balance	Balance

This mixture was manufactured gravimetrically on laboratory balances calibrated with N.I.S.T.溯源able weights.

Certified by:



Ph: 281-340-0781 www.hydrocarbonlaboratories.com



Hydrocarbon Laboratories

Date: 15-May-19

Customer: TRC Environmental Corp.
9225 US Highway 183 S
Austin, TX 78747

PO# 1272H
WOR: n/a
Part #: 1402

Date of Production: 05/19
Expiration Date: 05/2021

Cylinder Number: CC516383
Cylinder Size: AL150
CGA: 350

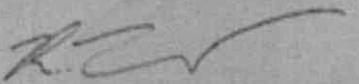
Type: Gas
Make Units: Mole
Product Class: Certified

Pressure: 2000 psig
Dewpoint: 32 deg F

Component	Requested	Concentration	Actual	Accuracy
Ethylene Oxide	50 ppm	50.0 ppm	Balance	2% Baseline
Nitrogen	Balance	Balance		

This mixture was manufactured gravimetrically on laboratory balances calibrated with N.I.S.T. traceable weights.

Certified by:



Ph: 281-840-0781 www.hydrocarbonlaboratories.com

Hydrocarbon Laboratories

Date: 15-May-19

Customer: TRC Environmental Corp.
9225 US Highway 183 S
Austin, TX 78747

Pump: -724
Wt-%: 0.9
P-101: 14625
Date of Production: 05/15/19
Expiration Date: 05/15/25

Cylinder Number: CC516371
Cylinder Size: AL150
CGA: 350

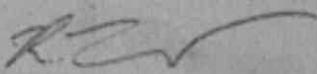
Type: Gas
Make Units: Mole
Product Class: Certified

Pressure: 2000 psig
Def. point: 32 deg. F

Component	Concentration Requested	Actual	Accuracy
Ethylene Oxide Nitrogen	1 ppm Balance	0.99 ppm Balance	2% Balanced

This mixture was manufactured gravimetrically on laboratory balances calibrated with N.I.S.T. traceable weights.

Certified by:



Ph: 281-840-0781 www.hydrocarbonlaboratories.com

Hydrocarbon Laboratories

Date: 15-May-19

Customer: TRC Environmental Corp.
9225 US Highway 183 S
Austin, TX 78747

PO# 13724
WO# na
Part #: 14805

Date of Production: 05/15/19
Expiration Date: 05/15/20

Cylinder Number: CC516370
Cylinder Size: AL150
CGA: 350

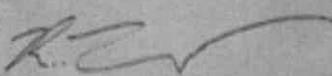
Gas
Make Units: Mole
Product Class: Certified

Pressure: 2000 psig
Dewpoint: 32 deg. F

Component	Concentration	Accuracy
	Requested	Actual
Ethylene Oxide	100 ppm	101 ppm
Nitrogen	Balance	Balance

This mixture was manufactured gravimetrically on laboratory balances calibrated with N.I.S.T. traceable weights.

Generated by:



Ph: 281-840-0781 www.hydrocarbonlaboratories.com